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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1987

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

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Staff Assistants

PART 8

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS

Printed for the use of the Committee on Appropriations

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1987

MONDAY, APRIL 14, 1986.

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS

COOSA-ALABAMA WATERWAY & PORT OF MOBILE

WITNESSES

HON. BILL DICKINSON

HON. SONNY CALLAHAN

J.T. "TOM" MCKENZIE, PRESIDENT, COOSA RIVER ACTION COUNCIL

MRS. MARY GEORGE WAITE, VICE PRESIDENT, COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, INC., CENTRE, ALABAMA

REPRESENTATIVE BOBBY JUNKINS, VICE CHAIRMAN, JOINT INTERIM LEGISLATIVE COMMITTEE ON COOSA RIVER NAVIGATION PROJECT, GADSDEN, ALABAMA

REPRESENTATIVE RICHARD LINDSEY, MEMBER, INTERIM LEGISLATIVE COMMITTEE, CENTRE, ALABAMA

COLONEL RALPH O. CLEMENS, JR., EXECUTIVE VICE PRESIDENT, COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, MONTGOMERY, ALABAMA

LISTER HILL PROCTOR, PRESIDENT, COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, INC.

W.J. "BUDDY" GRIFFIN, DIRECTOR, ALABAMA WATERWAYS DEVELOPMENT AGENCY

Mr. BEVILL. The committee will come to order.

As you know, this is the most important day of the year. This is Alabama day. John has been waiting to see you, too, just like Bill Dickinson, and I and all of us.

We are proud to have you here with us today. In order to let Congressman Dickinson get back to his Armed Services Committee and keep the country safe from attack and all, the Chair will recognize Mr. Bill Dickinson, and you may proceed as you wish, Bill.

Bill, we are also glad to hear from you.

Mr. DICKINSON. Thank you, Mr. Chairman.

I also enjoy and appreciate the opportunity of coming to speak on behalf of Alabama Waterways Systems. Since I am the lead-off witness, if it is appropriate, I would like to recognize Ralph Clemens, Executive Vice-President of the Coosa-Alabama River Improvement Association who is with us today, and Lister Hill Proctor of Sylacauga, Alabama, the President of the Coosa-Alabama Association.

I express sympathy for the recent death of Bill Brewbaker of Montgomery who was Systems Secretary-Treasurer.

Mr. BEVILL. Ralph has one of the best substitutes and representatives anyone could have, Mary George Waite.

Why don't you come up to the table.

Mr. DICKINSON. Also Larry Lee is the new Executive Director of the Tri-Rivers Waterway Development Association, and Baxter Harcourt of Georgia who is President, and Homer Hirt of Sneeds, Florida, who is Vice President. I am not sure he is here.

I am particularly pleased that Larry Lee is here in his present position and not in my job. I would like to, on behalf of all the Alabama Waterways Systems, express our very sincere and deep appreciation to you, Mr. Chairman, for your leadership and guidance over the years.

We have had good progress in Alabama. We are very dependent on our waterway systems, and I think the prosperity of our state looking down the road is inextricably tied with our waterways systems, whether it be from the Coosa, from the Chatahoochee on the east bank to the Tenn-Tom on the western side, and all in between.

We are pleased with an abundance of water, and the development of it really portends the development and prosperity of our State in the future.

Both the Coosa-Alabama and the Tri-Rivers are asking the full Corps capability on operation and maintenance plus Tri-River supports a $300,000 Corps basin study along with O&M money on locks and dams below Eufaula and in Columbia on the Tri-Rivers System.

If it is agreeable with the Chair and the Committee, I would like to submit my statement on both of these systems for the record and just make impromptu remarks as to the system.

Mr. BEVILL. Without objection, both statements will be made part of the record.

Mr. DICKINSON. The Congress and this committee has been very kind to us in Alabama in the past. We have had some dramatic growth along the Tenn-Tom. We have had some additional growth on the other systems.

To a very large extent we have worked out our differences in the Tri-Rivers System with Florida. That was at an impasse for several years, but as you will recall, the Corps has gone in and removed large boulders and the impediments to navigation to a very large extent below the Alabama and North Florida line.

I think there is really no big problem except time and money in developing the Tri-Rivers System, now will go all the way up to Columbus, Georgia, and enhancing the navigation and the industry all up and down that river is very important to us.

My district fronts the river from the Florida line all the way up to the Russell-Henry County line. So, we have a real deep and abiding interest in the development of this system.

We appreciate the opportunity to come and testify today. We appreciate your consideration in the past, and we look forward to the kind administrations of this committee in the future.

Thank you very much.

[The statement of Hon. Bill Dickinson follows:]

TESTIMONY IN BEHALF OF ALABAMA WATERWAYS
CONGRESSMAN BILL DICKINSON
Monday, April 14, 1986
Before Energy and Water Development Subcommittee
Committee on Appropriations
House & Senate

Mr. Chairman,

Alabama, as you know, is blessed with a large number of waterways, many of which provide vital links of transportation from mid-America to the Gulf of Mexico, and numerous other benefits to the people and to the economy of our State.

The two waterway systems that directly affect the Second Congressional District of Alabama are the Coosa-Alabama and the Apalachicola-Chattahoochee-Flint.

It is on their behalf, and our other waterways, that I appear before you today in support of the Corps of Engineers' budget requests for operation and maintenance of these waterways, along with operation and maintenance for their supporting locks and dams, a basin study, and one request for construction funds on the Warrior-Tombigbee System in Alabama.

On the Coosa-Alabama System, as on our other waterways, the consistent reliability of the nine-foot channel during dry seasons is of major concern if industry is to recognize the advantages of river transportation, especially from Montgomery to the Port of Mobile.

The Coosa-Alabama's request for the Corps' full capability of $10,343,000 would help finish a large amount of clearing, dredging and repair work scheduled along the waterway including some resurfacing of roadways. The Corps' request for the Coosa-Alabama is only $4,924,000 and so I leave it to your good judgement as to the final figure appropriated.

Separate funding is requested for operation and maitenance and construction in Mobile Harbor.

On the Apalachicola-Chattahoochee-Flint, I am happy to report that unofficial figures show 1985 as a record-setting year for commercial use of what is popularly known as the Tri-Rivers.

Tonnage shipped on the system was approximately 1,237,274, which represents an increase of 26,274 tons over 1984 and the second straight year that tonnage has exceeded one million tons. When you consider the decreased movement of grain and coal nationally, this is great news for the Tri-Rivers, and it graphically illustrates that industry and shippers are regaining confidence in the reliability of the system. It is this reliability that we must continue to nurture and build in the days ahead.

The Corps has listed $5,907,000 in its budget for operation and maintenance and the Tri-Rivers Waterway Development Authority is asking for the full Corps capability of an additional $1.5 million. Also requested is $300,000 for a basin economic impact study, and operation and maintenance money for the Walter F. George Lock and Dam below Eufaula and the George W. Andrews Lock and Dam at Columbia.

The Warrior-Tombigbee Waterway System, which flows from the coal-dominated Warrior Basin in northwest Alabama, through various industrial sites around Birmingham, down to the Port of Mobile, has a system of modern locks and dams with one exception, the William Bacon Oliver lock and dam near Tuscaloosa.

The operational efficiency of this waterway is seriously impaired by the bottleneck caused by this one remaining substandard lock. It is a pre-World War II lock and is smaller in size than the other five. The small size necessitates tows having to be broken apart and having to utilize multiple lockages to get through. This is time consuming and causes added risk factors.

The Corps is asking $11,948,000 for the Warrior-Tom and the Corps full capability is $4,232,000 more. In addition, a new Oliver Lock and Dam would cost $10.5 million.

Mr. Chairman, I join you in being pleased with the progress made on another of our State's great waterways, the Tennessee-Tombigbee, which is well underway; and I would like to mention one small project in our State that has been of personal interest to me for a number of years, and that is the serious erosion problem at Fort Toulouse in Autauga County. If more attention is not shown, we will see one of our historic sites literally washed away. As you know, your subcommittee has already appropriated funds to help with the erosion problem but the Corps'authorization has been bottled up for years in water bills that have never passed. Fort Toulouse is included in HR 6 and SB 1567 which I understand will go to conference soon and it is my hope that this much-sought authorization can be accomplished.

May I close, Mr. Chairman, by expressing my appreciation to you personally for the guidance and leadership you have shown these Alabama projects for your years on this Committee. Alabama is, indeed, grateful to you.

Mr. **Bevill**. Bill, you are talking about the Tri-Rivers Project there. You certainly deserve a lot of credit on that.

Now, for the first time that waterway is navigable the year round. I remember at least one or two new large industries were going to locate there until they learned the water was not navigable year round.

But now that won't ever happen again, because it is navigable. I think that is commendable.

Mr. **Dickinson**. There was a commitment to build there and then when they learned that, they did, in fact, pull out.

It was a disappointment at the time, but as you say, we think we have obviated that problem for the future, and we look forward to green lights ahead.

If I might beg off now, I have another meeting that I would like to attend, and I appreciate you taking me first and out of order.

I know I will be leaving you in capable hands between the gentleman from Jasper and the gentleman from Mobile.

Mr. **Bevill**. I did want to, before you get away, point out to them, too, that you and our good friend and colleague, Congressman Bill Nichols, worked so hard getting an authorization bill through the House so that this committee could fund it, which it did, the other erosion problem at Fort Toulouse.

I remember we were accusing our good friend and colleague, of course, in jest, Congressman Bill Nichols, that he was very interested because his washing of Indian skeletons down from his district rather than down in Alabama across into our district.

He was very concerned, because he has been voting those skeletons all those years. Then when they wash on down into Bill's district, Bill Dickinson's district, he would start voting them.

Thank you very much.

Mr. **Dickinson**. Thank you.

Mr. **Bevill**. We are also pleased to hear from our colleague, Mr. Sonny Callahan.

You may proceed.

Mr. **Callahan**. I appreciate the opportunity to appear before your committee and to meet with my two colleagues, Mr. Myers and Mr. Rudd, and especially you, Mr. Chairman, being from my home state.

I said it at a breakfast meeting this morning that Alabama——

Mr. **Bevill**. It is all right to say it again.

Mr. **Callahan**. Alabama could indeed ill afford not to have you here in Congress. You are a tremendous compliment to our State, and not only do the people of Alabama appreciate the services that you give to them, but the rest of the people in America, as well.

I am proud to serve with you and especially being from that area of the State that depends so heavily upon the ability of this committee to understand our needs.

You have been most generous in your time and your efforts, and we, the people of southwest Alabama, truly appreciate that effort and that consideration that you have so graciously given to us during, especially, your tenure as chairman of this committee.

I request, Mr. Chairman, $30.368 million in operation and maintenance funding for the Coosa and Alabama Waterway. This represents the Corps of Engineers capability on various segments on the system.

No funding will be requested this year to extend the project from Montgomery to Gadsden, but I am encouraged that State officials and dedicated local interest continue to pursue this work.

It is to their credit that they have such a large delegation here with us today. I strongly support their efforts and their testimony.

I am very pleased that Tenn-Tom has been completed. Shipments on the Tenn-Tom are growing and include coal, agricultural products, metals and petroleum products, paper wood products and chemicals. Recreational use is heavy, and my prepared statement requests adequate O&M funding for the project.

I also want to lend my support to the Black Warrior, the Warrior and the Tombigbee River System. My statement will request the Corps' capability for operation and maintenance and start up funding for the new Oliver Lock and Dam.

Mr. Chairman, I regret, also, as Mr. Dickinson did, my schedule will not permit me to be here during testimony on the Black Warrior, Warrior and Tombigbee System, and the Tenn-Tom.

I fully endorse the request which will be given by these groups and am submitting statements in behalf of these important waterways.

Mr. Bevill. Without objection, those statements will be put in the appropriate places on each of the projects.

Mr. Callahan. Thank you, Mr. Chairman.

I am also submitting a separate statement requesting funds for Mobile Harbor and related projects in the Mobile area.

As you know, these projects have no official representation, so I appreciate the opportunity to lend them my support in this manner.

Start-up funding for Fiscal Year 1987 for deepening in Mobile Harbor Channel is essential. Some of the other projects which are important to me are the Three Mile Creek Flood Control Project, the Bayou La Batre Channel, Perdido Pass, Gulf Coast Intracoastal Waterway, Dog and Fowl River Projects, Dauphin Island Channel, the Bayou Coden Channel and Bon Secour.

Finally, Mr. Chairman, I want to thank you again for the leadership you have exhibited with respect to water transportation, both in Alabama and in the nation, and most specifically I am deeply appreciative of your work last year to insure authorization of the Mobile Harbor deepening project.

Thank you for letting me appear today on behalf of the Coosa-Alabama and the other Alabama Waterway projects.

[The statement of Hon. Sonny Callahan follows:]

STATEMENT OF REPRESENTATIVE SONNY CALLAHAN
FIRST CONGRESSIONAL DISTRICT OF ALABAMA
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS

APRIL 14, 1986

COOSA-ALABAMA WATERWAY

Mr. Chairman, members of the subcommittee, I am happy to appear here today to voice my support for the fiscal year 1987 appropriation request for the Coosa-Alabama River System.

For operation and maintenance along the system, $30,368 million is requested in FY 1986. Specifically, $10,343,000 is required for O&M on the Alabama River; $4,336,000 for the Millers Ferry Lock and Dam; $3,448,000 for the Robert F. Henry Lock and Dam; $8,233,000 for Allatoona Lake in Georgia; and $4,008,000 for Carters Lake in Georgia. The total funding level, while above the budget recommendation, is necessary to ensure proper maintenance of the river system. Without adequate maintenance, the river will not achieve maximum efficiency and navigation will be impeded. Operation and maintenance work on the Alabama River will keep hydro power plants in good condition and will allow dredging and routine maintenance work to continue to provide us with the most energy-efficient means of transportation. If we do not provide adequate funds for dredging, snagging, spoils disposal, repair of public facilities, and other important maintenance work, we will only have more costly repair bills in the future.

Although the Coosa River Navigation Project, which would extend the navigation project from Montgomery to Gadsden, received a negative benefit/cost analysis, I am encouraged that the State of Alabama is seriously pursuing the project. There will be no request for construction funds in fiscal year 1987. However, State officials are working to increase its contribution to the non-Federal share of the project's cost. I am hopeful that we will be in a position to get the Coosa segment of the system on track in the near future.

Mr. Chairman, I appreciate having had this opportunity to voice my strong support for the Coosa-Alabama River System. Thank you for your consideration of my request.

Mr. **Bevill**. The first witness on our list will be Ms. Mary George Waite. We will be glad to hear from you now.

As these members come in, I may interrupt to take them so they can get back to their respective committee hearings, so you will understand we do this continuously to keep them from being held up too long.

Ms. **Waite**. Mr. Chairman, I am Mary George Waite, the Vice President of the Coosa-Alabama River Improvement Association, Inc., and I am here today—I am not Senator Lister Hill Proctor, as you can tell, who is the President of our association.

Senator Proctor sends you his best and wants me to tell you that he is really supporting this project, but he is a State Senator in Alabama and he was unable to be in Washington this morning.

We are real proud to bring this real fine delegation back again before your committee, and we just have to say, and I, particularly, that the Chairman of this committee just happens to be the best Congressman on the Hill, and I am not prejudiced; I just live in his district.

We know, so we are so happy that you are here, and we are so proud of you and what you do for these United States.

Mr. **Bevill**. Thank you.

Ms. **Waite**. We want to thank your distinguished colleagues, too, on this subcommittee. We feel like old friends, particularly with you two sitting there and some more of them, because we have been here before, and we will be back, we really will.

Mr. **Bevill**. If we can help you come back that will be good.

Congressman Myers of Indiana and I were sworn in the same day. Congressman Rudd of Arizona is here, a former FBI agent, and he does a great job representing these big water resource projects in the nation now, and Congressman Myers is on the Wabash River, so he knows the problems of floods and flood control, the importance of it.

I understand Senator Denton has come in. Gary, didn't know you were here. If I may just interrupt you there, Mary George, I am going to ask the Senator so he can testify.

Senator Denton, you may proceed as you wish.

Senator **Denton**. Thank you very much.

Thank you for deferring, Ms. Waite. Thank you for allowing me the opportunity, Mr. Chairman, to express my support for the waterway projects that are a vital economic interest to Alabama.

I want to commend you, Mr. Chairman, the Chairman of the subcommittee and the Chairman of the full committee, for their support of those projects.

There are a number of important waterway projects throughout the State that require sufficient funding for continued operation and maintenance.

The O&M funds which the Corps of Engineers has found necessary for the following year is as follows: $19.6 million for the Tenn-Tom; $9.16 for the Mobile Harbor; $12.2 for the Black Warrior Tombigbee; $7.0 for the Gulf Intracoastal Waterway; $1.3 for the Perdido Pass; a half million for the Dauphin Land Bay; $293,000 for Dog River and Fowl River; $680,000 for the Bon Secour Bay area; and $141,000 for the Bayou Coden.

The Corps of Engineers has requested appropriations for the construction of several projects.

They include $15 million for deepening the Mobile Harbor; $10.5 million for the Oliver Lock and Dam on the Black Warrior; and $2.3 million for the Three Mile Creek Flood Control in Mobile.

In addition, they request $60,000 for a study to deepen the Bayou La Batre Channel. I know, Mr. Chairman, you are familiar with all of those projects and you know they are worthwhile. That is the number which the Corps has put on the requirements, and we think they are appropriate.

No one knows better than you, Mr. Chairman, how hard hit Alabama waterways have been by competition in the coal, steel, and textile industries, as well as others, and much of this is caused by the high value of the dollar which we hope is relating itself more advantageously now.

Consistent development of our State's waterways is a major concern to the business interest of Alabama, as you know, Mr. Chairman, and is as essential for providing adequate transportation to existing industry and continued growth.

Our waterways connect north with the south. Alabamians consider our waterways our greatest national resource.

As you know, the President's Fiscal Year 1987 appropriations budget request for the Alabama-Coosa River, including the Clayburn Lock and Dam, is $4.9 million, but the Coosa Alabama Association feels strongly that $10.3 million is needed to adequately address the problems with their navigational channel downstream.

I must stress the need for more money for the Alabama-Coosa Project. There is a tremendous number of people involved in that concern. The consistent reliability of the nine-foot channel during dry summer months is essential if industry is to take advantage of the river system from Montgomery to Mobile.

The additional money is needed to finish the two-year project begun in Fiscal Year 1985. Environmental permit clearances have been delayed, and the project is incomplete.

We are confident the additional money would allow the Corps to complete the project during Fiscal Year 1987.

I am glad that due to efforts by the interim legislative committee on the Coosa River Navigation Project the State has fulfilled its non-federal responsibilities with regard to that project.

As you know, Mr. Chairman, Congress recently passed an Omnibus Waterway bill that will prove to be a blessing and, in some ways, a curse for economic life of waterways.

The bill included funding for several Alabama projects, but at the same time leveed a heavy user fee upon the already struggling towing industry. This fuel tax will hit our State hard.

Your careful consideration, Mr. Chairman, of the request and points that I have made and the consideration of your committee will permit water transportation to move ahead in Alabama for improved commerce permitting increased federal revenues as well as greater prosperity in our state.

I want to thank you very much, Mr. Chairman.

Mr. **Bevill**. Very good. Very good.

The Chair recognizes Mary George Waite.

Ms. **Waite**. Thank you. We have a very fine delegation that has come today, but we have lots more support back in Alabama. So, in addition to our delegation, we have submitted a detailed statement of our requirements and a package of 34 statements from people back home, along this waterway.

Most of them are letters from private firms and individuals. Others reflect the position of counties and municipalities, and we ask that these statements be entered into the hearing record, Mr. Chairman.

Mr. **Bevill**. All right. Without objection, those statements will be made part of the record.

[The information follows:]

STATEMENT OF

COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, INC.

By

LISTER HILL PROCTOR

PRESIDENT

Before

THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS

HOUSE

10:00 A. M. Monday April 14, 1986

Statement of

COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, INC.

Submitted by

Lister Hill Proctor, President

Sylacauga, Alabama

Mr. Chairman and distinguished Committee Members:

I am pleased to have this opportunity to tell you what we feel is needed in the Fiscal Year 1987 Energy and Water Development Appropriations for the projects listed below. As the President of our Association I speak for a large and diverse group of citizens who see continued development of the Coosa-Alabama Waterway as an opportunity for growth in our region and all of the nation.

Our membership is reflected in the composition of the delegation we brought with us today. Some use the waterway now, either as shippers or tow operators. Others are businessmen, bankers and a variety of other private individuals who have a stake in future economic development for their firms and their successors to enjoy. Then there is the larger group of elected officials and their constituents typical of the twenty-three municipalities and nineteen counties along the water who are members of this Association. These people were elected - as you were - to lead; to govern now and also plan a better future for the citizens they represent.

Mr. Chairman, we thank you for the support your committee has given us in the past. The complex funding decisions that face the Congress this year have become more challenging than ever, but we are convinced that the appropriations we support are not only essential, but will bring a substantial return on government investment.

Tabulated below are our specific funding requests for Fiscal Year 1987. The projects we support are part of a waterway system that originates in Northwest Georgia and flows diagonally across the State of Alabama to Mobile Harbor. For comparison purposes we included the amounts in the Administration's Budget Request.

Surveys	Budget Request	Our Request
Operations and Maintenance (O&M)		
. Alabama-Coosa River, AL* (Alabama River including Claiborne Lock and Dam, AL)	$ 4,924.000	$ 10,343,000
. Millers Ferry Lock & Dam, AL	3,496,000	4,336,000
. Robert F. Henry Lock & Dam, AL	3,220,000	3,448,000
. Mobile Harbor	7,112,000	9,167,000
. Allatoona Lake, GA	4,561,000	8,233,000
. Carters Lake, GA	2,780,000	4,008,000

*Includes 72 miles from the mouth of the Alabama River through Claiborne Lock and Dam up to Millers Ferry. The Coosa River is not included.

We, like other citizens throughout the country are looking for positive ways to stimulate the economy and increase productivity. Only by doing this will the burden on productive taxpayers be reduced. On the other hand, spending reductions or freezes on the investments most directly linked with our country's future avoids the problem only by ignoring it, not solving it. The solutions to our dilemma lie in decisions based on vision and sound judgement.

The barge industry continues to be gripped by the depression which began some years ago. While the general economy has participated in a recovery, accompanied by low interest rates and stabilized inflation, the substantial drop in oil prices has made that fuel the obvious choice for the short term. The result is lessened demand for coal, this country's most plentiful fuel. At one time our barge lines and docks were geared up for what was anticipated to be a tremendous upsurge in worldwide coal requirements. Although delayed, that demand will be regenerated once the oil cartels again organize themselves and rigidly police production. When industry again reverts to coal, the waterways must be ready. That is why an investment in the future is reasonable and prudent, even in light of today's fiscal requirements.

As I enter my third year in service to the Association, Mr. Chairman, I am more convinced than ever that the founders of this organization developed our mission which, through 96 years has been consistent and productive to state and nation. Our founder, William Patrick Lay, who also founded the Alabama Power Company, felt that our internal waterways were a source of wealth to the nation but had to be developed and maintained in order to reach their potential. Stability in the Association's leadership has been a distinct advantage since the essence of river systems investment must not be a short term scheme. To examine the benefits of developing our waterways in terms of 5 or so years is, I am afraid, a serious mistake; a mistake which many "nay-sayers" and doomsday artists are wont to use in their "I-told-you-so" scenarios. The Waterways Journal stated recently that the Gulf Intracoastal Waterway was planned to handle five million tons of cargo each year. Before the towing industry experienced depression, the Waterway was handling 100 million tons each year! The point, however, is that the tonnage figures peaked after 25 years of maintenance and development. Again, short term expectations can be counterproductive.

The threat of escalating user fees and other cost-sharing devices still looms large to river users. A recently imposed fuel tax of 10¢ per gallon and the proposed penny a gallon per year increase in the future will do severe damage to an already overstressed barge industry. However, we feel that in spite of the aspect of taxing operators, a solid piece of legislation which describes future requirements for waterway development is a positive development. Additionally, if the Congress maintains a status quo user fee stance into the late 1990's, the industry, as Senator Danforth of Missouri stated, will at least be able to plan with a reasonable assurance of stability.

Because of the many uncertainties surrounding the budget and the state of the towing industry, we are not going to request construction funds for the Coosa River Navigation Project this year. Although this project has been authorized since 1945 and the first portion to Montgomery finished in 1972, the reality of the nation's current fiscal situation tends to make us press for increased reliability of the Alabama River channel and improvements in the Port of Mobile. We continue to work with the State of Alabama's Joint Interim Legislative Committee on the Coosa River Navigation Project (chaired by Senator Bill Drinkard and Representative Bobby Junkins) which sponsored legislation commiting the state to their share of non-federal appropriations. The state is very supportive of the project but shares our recognition of limited funds availability. We shall vigorously maintain our position of updating survey work and administrative requirements to keep the "on-the-shelf" capability of the project as current as possible.

Now I would like to address specific appropriations requests. Last year the point was made that the Alabama-Coosa River Project did not include, nor even approach the vicinity of, the Coosa. The project actually involves the 72 miles from the mouth of the Alabama River through Claiborne Lock and Dam up to Millers Ferry. As you travel upstream from Mobile, you must traverse the Claiborne, Millers Ferry and Robert F. Henry locks. There still needs to be substantial rehabilitation work on the Alabama -- particularly the lower portion. Reliability of the channel is still below the standard which was envisioned in the Fiscal Year 1985 appropriations when $9.653 million was earmarked to modify the training dike system and change the dredging profile. Some of the environmental clearances and preliminary administrative coordination still need to be completed. Each year the total rehabilitation effort is delayed is a year lost to those interests whose efforts to use river transportation are hampered because of channel reliability problems. Although our focus is on the Alabama-Coosa River Project, several programs, for example; Allatoona and Carters Lakes, Georgia, Mobile Harbor, and the three locks and dams aforementioned are in need of work over and above that which can be completed with the Administration's budget request.

Mr. Chairman, the support of yourself and your committee in the past has been superb and deeply appreciated. I know that each of you on the committee is deeply concerned with future developments as they relate to our waterways. A substantial fuel tax has been collected since 1980 and yet our government has not begun a new major waterway project since that time. Gramm-Rudman alone will not bring our great country back to a position of world economic preeminence. Are we to believe that by 1991 all our woes will be cured as a result of continuing budget cuts? No, Mr. Chairman, a balanced budget is only one thread of that fabric which must be tightly woven to hold our country together. Production is the key to a growing, vital economy. And to support that production we will always need competitive and plentiful intermodal transportation capability -- capability which is low-cost and responsive. It took 82 years after our Association was founded before the channel was opened to Montgomery from Mobile. William Patrick Lay, Association founder, wrote to a member of Congress in 1902 proposing locks on the Coosa River. Historical perspectives on almost every major public work in this country have been positive and Mr. Lay's statement "...hoping that the importance of the Coosa River may be properly appreciated..." is an admonition which should not go unheeded. Bold and visionary strokes are needed to bring America back to the forefront of world commerce -- not the least of these would develop an uncompromising commitment to our waterways.

In conclusion I wish to say that our requests for the projects cited exceed the amounts in the President's Budget. You and your colleagues will note that our requests more closely approximate the capability of the Corps of Engineers for additional work needed to keep these fine activities in top working condition. The combination of timely periodic maintenance of facilities and the much-needed training dike repair and dredging programs along the Alabama River are essential to keep what we have in good working order. Our users need to have a dependable channel if we are to utilize the river as much as its potential will allow.

We appreciate the opportunity to appear before this distinguished Subcommittee. We know that our requests will be received with balance and consideration. We will continue to speak out on behalf of the entire waterway from Mobile to Rome, Georgia; first to maintain the Alabama River and Mobile Harbor in a productive configuration and, second, to lay the groundwork for the time when sound judgement and economic conditions will signal the beginning of building on the Coosa River.

Lister Hill Proctor
President
COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, INC.

LIST OF STATEMENTS REQUESTING APPROPRIATIONS FOR FISCAL YEAR 1987 FOR PROJECTS ON THE ALABAMA-COOSA SYSTEM SUBMITTED FOR RECORD AND FILE OF THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR ENERGY & WATER DEVELOPMENT HEARINGS 10:00 A. M., APRIL 14, 1986.

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1. Coosa-Alabama River Improvement Association, Inc., Montgomery, AL
2. Alabama Department of Economic and Community Affairs, Montgomery, AL
3. Alabama Development Office, State of Alabama, Montgomery, AL
4. Mobile County Commission, Mobile, AL
5. Mobile Area Chamber of Commerce, Mobile, AL
6. Dravo Basic Materials Company, Inc., Mobile, AL
7. Warrior & Gulf Navigation Company, Chickasaw, AL
8. First Alabama Bank/Mobile, Mobile, AL
9. Mississippi Chemical Corporation, Yazoo City, Mississippi
10. Parker Towing Company, Inc., Tuscaloosa, AL
11. Robert M. Creswell, Camden, AL
12. Alabama -Tombigbee Regional Commission, Camden, AL
13. Southeast Alabama Economic Development Agency, Troy, AL
14. Monroe County Commission, Monroeville, AL
15. City of Monroeville, Monroeville, AL
16. Monroeville Area Chamber of Commerce, Monroeville, AL
17. Tate, Heinz & Ellis, Inc., Insurance & Real Estate, Selma, AL
18. Montgomery County Commission, Montgomery, AL
19. Union Bank & Trust Company, Montgomery, AL
20. Anne Tidmore Flags, Inc., Montgomery, AL
21. Chilton County Commission, Clanton, AL
22. The Anniston Star, Anniston, AL
23. The City of Gadsden, Gadsden, AL
24. Gadsden-Etowah Chamber of Commerce, Gadsden, AL
25. St. Clair County Commission, Ashville, AL

LIST OF LETTERS AND RESOLUTIONS FOR HOUSE SUBCOMMITTEE, APRIL 14, 1986.

26. Rome Area Chamber of Commerce, Rome, Georgia
27. Alabama State Docks Department, Mobile, AL
28. Vulcan Materials Company, Birmingham, AL
29. Montgomery Area Chamber of Commerce, Montgomery, AL
30. City of Prattville, Prattville, AL
31. Cherokee County Commission, Centre, AL
32. James T. Jordan, Centre, AL
33. Scott Paper Company, Natural Resources Division, Saraland, Alabama
34. City of Montgomery, Montgomery, AL
35. Governor's Office, State of Alabama, Montgomery, AL
36. Etowah County Commission, Gadsden, AL
37.
38.
39.
40.

Alabama Department Of Economic And Community Affairs

GEORGE C. WALLACE
GOVERNOR

W.M. "BILL" RUSHTON
DIRECTOR

April 14, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Appropriations for
Energy and Water Development
United States
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I want to thank you for the opportunity to appear before this Subcommittee along with my fellow Alabamians in support of continued navigation of the Alabama-Coosa River Waterway. Specifically, we endorse the request of the Coosa-Alabama River Improvement Association and its supporters for continued funding of the full-time operation and the necessary maintenance of the Alabama-Coosa River Waterway and of Mobile Harbor during FY 1987.

The existing navigation project on the Alabama River is proving to be, even in these continuing economically-depressed times in Alabama, a cost-effective method of commercial transportation. Official tonnage for 1984 was 2,977,000 tons with a 1985 estimate of over 3 million tons. It has provided for numerous new opportunities and jobs in central and south Alabama. Several new industries have located in the area based on the availability of waterway transportation. In several instances, the waterway has provided for the opportunity to develop resources which are vital to the future of the area, but could not have been developed without the navigation project. The existing project, in addition to commercial navigation, provides for hydroelectric generation, fish and wildlife enhancement and recreational opportunities, all in harmony with sound environmental policy.

3465 Norman Bridge Road • P.O. Box 2939 • Montgomery, Alabama 36105-0939 • (205) 284-8700

We support the Association's request for a FY 87 funding level of $10,343,000 for the Alabama-Coosa River Project. This funding level is $5,419,000 above the President's request, and would provide adequate funding for regular Operation and Maintenance expenditures, as well as extra funds needed for completion of rehabilitation work to improve the reliability of the 9-foot channel during dry seasons. Even though this work was begun in FY 85, delays have prevented completion. We believe the Association's requested level of funding would enable the Corps to finish the work on schedule in FY 87. We also support the Association's request for funding Millers Ferry Lock and Dam ($4,336,000), and Robert F. Henry Lock and Dam ($3,448,000). At the appropriate time, we request your support for the resumption of design and engineering work on the Coosa River Navigation Project. This project is vitally important to Alabama and to the entire region. When it is completed, this project will benefit the regional development potential of the area.

Also, we support adequate funding for the operation and maintenance of Mobile Harbor. Mobile Harbor is vital to the ongoing operations of the Port of Mobile and the Alabama-Coosa River Waterway. Over the past eight years the State of Alabama has invested over $250 million in expanded and improved Port facilities. The Alabama State Docks' facilities now offer the most advanced coal-handling technology available in this country. Similar improvements have been made for grain handling and bulk materials. These investments demonstrate the State of Alabama's long-term commitment to the Port of Mobile and the Alabama-Coosa River Waterway.

In closing, I would pledge my support and that of the Alabama Department of Economic and Community Affairs in assisting the State of Alabama to meet its responsibilities and obligations for the Alabama-Coosa River project as defined by Congress. I appreciate the support and assistance which you and all the members of the Subcommittee have given us over the years, and for insuring adequate funding is provided for the operation and maintenance of the existing Alabama-Coosa River Project.

Sincerely,

Bill Rushton

W. M. "Bill" Rushton
Director

WMR/adt

STATE OF ALABAMA
ALABAMA DEVELOPMENT OFFICE

GEORGE C. WALLACE
GOVERNOR

JAMIE "RED" ETHEREDGE
DIRECTOR

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Bevill:

I am pleased to support the testimony of the Coosa-Alabama River Improvement Association in requesting appropriations for Fiscal Year 1987.

This nation's waterways are essential to realizing an efficient and progressive increase in the national economy. The continued maintenance and improvement of our river systems requires a vision of tomorrow's growth. To discontinue or impair this investment in our future would restrict future growth of manufacturing, mining and agricultural industries, particularly those located in the Coosa and Alabama river basin.

Our state is well served by rail and truck transportation networks. The only mode remaining to be fully developed is Alabama's waterways. With continued maintenance of the Alabama River's three locks and dams and upgrade of Mobile Harbor, we can bank on providing competitive transportation from Montgomery to Mobile. Additionally, the Coosa River Navigation Project, although on hold, should maintain the potential for use to Gadsden and Rome, Georgia. With that in mind, the project should be actively supported as a future public work.

Your consideration and support in this matter will be greatly appreciated.

Sincerely,

Jamie Etheredge

Jamie Etheredge
Director

135 S. UNION STREET/MONTGOMERY, ALABAMA/205 263-0048
MAILING ADDRESS: STATE CAPITOL/MONTGOMERY, ALABAMA/36130

JAMES L. "JIM" MASON, PRESIDENT
OLIVETH M. ARCHER, COMMISSIONER
DOUGLAS WICKS, COMMISSIONER

W. C. HELVESTON
ADMINISTRATOR

DOUGLAS L. MODLING
DEPUTY ADMINISTRATOR

MOBILE COUNTY COMMISSION
POST OFFICE BOX 1443 MOBILE, ALABAMA 36633

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

We strongly approve efforts of the Coosa-Alabama River Improvement Association, Inc. to secure necessary funding for Fiscal 1987 to continue to maintain and extend our river system.

Funding is essential to continue federal maintenance and operation of the Alabama River Waterway from Mobile to Montgomery and to maintain and improve the Mobile Harbor.

If we are to effectively compete with the other nations of the free world we must continue to maintain, develop and expand our waterway system. The waterways of Alabama offer an excellent opportunity for this development in the years ahead. We must not allow this excellent system to stagnate for lack of funding.

We appreciate your efforts in past years and your continued assistance and support will be greatly appreciated.

Sincerely,

James L. Mason
JAMES L. MASON, President

Oliveth M. Archer
OLIVETH M. ARCHER, Commissioner

DOUGLAS WICKS, Commissioner

WCH/bw

March 19, 1986

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for Energy and Water Development
House of Representatives
Washington, D. C. 20515

SUBJECT: Coosa-Alabama Rivers Systems

Dear Congressman Bevill:

On behalf of the 3,500 members of the Mobile Area Chamber of Commerce, I would like to take this opportunity to express our support for continued improvement to the Coosa-Alabama River System.

This river system plays a vital role in the shipment of international commerce (export/import) through the port of Mobile and in turn assist in our international balance of payments with other nations.

We further respectfully request that the FY 1987 Budget includes sufficient funds to meet the Corps of Engineers capability for the overall operation and maintenance to this project.

Cordially,

M.B. Rambeau

M. B. Rambeau, Director
Trade and Transportation Division
Economic and Development Department

MBR:lla

Mobile Area Chamber of Commerce
P.O. Box 2187, Mobile, Alabama 36652-9986, 205/433-6951

DRAVO BASIC MATERIALS COMPANY, INC.

P. O. Box 2068
Mobile, Alabama 36652
205 432-2651

A Dravo Company

SOUTHEASTERN DIVISION

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

We respectfully request your consideration and approval of the following projects on the Coosa-Alabasa River System for fiscal year 1987:

1) Resume Coosa River Navigation Project.
2) Continued rehabilitation of training dykes and modification of dredging profile for the Alabama River Channel below Claiborne Lock & Dam.
3) Operation and maintenance - Claiborne Lock & Dam.
4) Operation and maintenance - Millers Ferry Lock & Dam.
5) Operation and maintenance - Robert F. Henry Lock & Dam.
6) Operation and maintenance - reservoirs and hydro-electric stations.
7) Operation, maintenance, improvements and deepening of Mobile Harbor.

We support the testimony of the Coosa-Alabama River Improvement Association and we join the efforts of its membership to maintain and extend the waterway to make the benefits of low cost, energy efficient water transportation available to a broader economic base.

Dravo Basic Materials Company, Inc. is one of the leading producers of construction raw materials and aggregates on the Gulf Coast. We rely extensively on the waterways of Alabama, Florida, Louisiana, Mississippi and Texas for production and delivery of our products. In 1985 we produced and moved via Alabama waterways over 1,400,000 tons of sand and gravel. We also transported over 125,000 tons of limestone as well as significant quantities of other products. Our projections for 1986 are:

Sand and Gravel	1,500,000 tons
Other	250,000 tons

Dravo

Dravo Basic Materials Company, Inc. operates a fleet of 23 boats, 85 barges and 7 dredges. We maintain a large terminal and handling facility on McDuffie Island in Mobile, Alabama in addition to numerous support facilities throughout South Alabama and the Gulf Coast.

The maintenance of authorized project dimensions is essential for the efficient, orderly production and delivery of materials throughout the waterway system. Drought conditions in 1985 resulted in low flows on the Alabama River. Fortunately, through the efforts of the Army Corps of Engineers and their maintenance dredging program, the cooperation of users and operators on the Alabama River and a lot of luck, navigation was maintained throughout the year even though draft restrictions did limit tow capacities. This condition emphasizes the need for the Corps to have the capability of overcoming extreme conditions in meeting its assigned task of operating and maintaining an efficient, orderly waterway system. In order to provide this capability, it is imperative not only that the Army Corps of Engineers be provided with the appropriations as per their budget requests, but also with the additional funds required to insure the Corps has the flexibility and capability to fully realize the potential of the Coosa-Alabama River System and the Port of Mobile.

We sincerely appreciate the Committee's faith in the future of the great waterway systems of the State of Alabama and welcome its continued support of these vital projects.

Yours very truly,

Leon M. Torbert, Jr.

/vr

WARRIOR & GULF NAVIGATION COMPANY
P.O. BOX 397
CHICKASAW, ALABAMA 36611

April 14, 1986

N.J. BARCHIE, JR.
PRESIDENT

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

I, Nicholas J. Barchie, Jr., am President of Warrior & Gulf Navigation Company and our company is a member of the Coosa-Alabama River Improvement Association. We are in support of the Association's request for FY87 and are testifying as part of a regional effort to improve and extend the waterway.

Warrior & Gulf is a barge line located in Chickasaw, Alabama and owns 27 towboats and 310 barges making us one of the larger water carriers operating on the Alabama waterways. With our current equipment ownership our annual capacity is approximately 10,~~000,~~000 tons. Additionally, we operate a coal handling and iron ore facility and one barge drydock at Port Birmingham; one barge drydock and one boat drydock at our Chickasaw facilities; and, a wholly owned subsidiary of Warrior & Gulf, Mobile River Terminal, is another bulk terminal handling various cargoes from and to ocean-going vessels in the Port of Mobile. Our total employment is 350 people.

Due to the recessionary times and the overall depressed level of business being experienced within the Inland Waterway Industry, the tonnage handled on the Alabama River in particular has been down substantially in comparison to prior years. WGN's primary business on the Alabama River has been the movement of woodpulp to Mobile for export to Europe and the Far East. Moreover, we have made various rate quotations to handle other business located along the Alabama River and are optimistic that our tonnage participation on this river will increase upon the economy improving.

Warrior & Gulf Navigation Company has been using the Alabama River for twelve or so years. The major limitation encountered on the Alabama River is severe shoaling during the summer months wherein the draft is restricted to no more than 6 feet, thus requiring the loaded draft of our barges being reduced to around 5.5 feet and requiring a very shallow draft vessel to provide the towing of our barges as our own vessel's draw 8.5 feet and cannot navigate this river during these periods of extreme low water. Therefore, it is important that the Corps of Engineers be given adequate funding in FY87 to continue the work on training dikes and dredging for improved reliability of the channel, so the Alabama River can reach its potential as a major inland waterway.

Furthermore, there is continued pressure before Congress for increased user fees, segment fees, and cost sharing, which we strongly oppose as the waterway users are currently paying a special tax on their diesel fuel. The latest raise in October, 1985 increases the burden on the users in an industry which has been fighting for its very own survival for the past several years. Additionally, the waterway users help the trade balance through lower freight rates giving the U. S. producers a better export market. The waterways provide a competitive alternative for shippers. The waterways provide efficient transportation productivity that lowers inflation and contributes to reducing the national deficit. In the meantime, large subsidies and tax advantages continue to be given to the railroads without any cost sharing requirements.

We respectfully request your continued support and assistance as your subcommittee considers appropriation of funds for the Alabama River's operation and maintenance.

Very truly yours,

Nicholas J Barchie

Nicholas J. Barchie, Jr.
President

dej

First
Alabama
Bank

First Alabama Bank
Mobile
Post Office Box 2527
Mobile, Alabama 36622-0001

Sheldon L. Morgan
Senior Vice President

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for
Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

This statement is rendered in behalf of the Coosa-Alabama River project on which design and engineering work was suspended in 1983. The resumption of that work is important for the continuation of the project toward the ultimate completion of the river basin improvements.

We also would like to request that the committee approve the necessary funds for operation and maintenance of the waterway portion that has already been improved between Mobile and Montgomery. This is vital to investments, both public and private, which have been made on the system.

Thank you for your consideration.

Sincerely,

Sheldon Morgan

Sheldon L. Morgan

SLM/mal

Mississippi
Chemical
Corporation
We Make Things Grow

Post Office Box 388 • Yazoo City, Mississippi 39194-0388 • (601)746-4131 • Telex 58-5449

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

Mississippi Chemical Corporation is a producer and shipper of chemical fertilizers. The company is a totally farmer-owned cooperative which supplies the fertilizer needs of its approximately 20,000 stockholders.

Mississippi Chemical strongly supports the Coosa-Alabama Improvement Assn. and wishes to join with them in a collective effort with other users to request continued funding for maintenance and improvement of the Coosa-Alabama Rivers.

A storage/distribution facility is maintained by Mississippi Chemical at Montgomery, Alabama to more efficiently serve the needs of the farmers in that area. Barge transportation is utilized for shipment of fertilizers from Pascagoula to Montgomery because of the substantial freight savings realized. Barge freight to Montgomery is approximately one-half that of rail.

Available barge loading draft varies during the year, with costs naturally being higher during low-water periods when barges must be light-loaded. Loaded tonnage varies greatly according to available draft, i.e., 6 ft.= 900 tons; 7 ft. = 1100 tons; 8 ft. = 1300 tons; and 9 ft. = 1500 tons. A year-round nine-foot channel would aid considerably in cost containment, as per-ton transportation costs escalate dramatically with limited draft.

Therefore, continued maintenance by the Corps of Engineers to provide full authorized depth is of considerable importance to Mississippi Chemical in its efforts to provide economical transportation in the delivery of fertilizers to the Montgomery facility. With the continued depressed state of the agricultural community, any increased costs are extremely detrimental.

Your support and continuing efforts in this regard are earnestly solicited and deeply appreciated.

Yours very truly,

James A. Pierce
Director of Transportation

PARKER TOWING COMPANY, INC.
P. O. BOX 72 • TUSCALOOSA, ALABAMA 35402 • 205-349-1677

April 14, 1986

Honorable Tom Bevill, Chairman
Subcommittee on Appropriations for
Energy and Water Development
House of Representatives
Washington, D.C. 20510

Dear Representative Bevill:

My name is Tim Parker, Jr., and I am Executive Vice President of Parker Towing Company, Inc. I wholeheartedly endorse and support the testimony of Mr. Ralph Clemens, Executive Vice President of the Coosa-Alabama Improvement Association, and his request to you for adequate operational and maintenance funding for the Coosa-Alabama River system.

Parker Towing Company operates a fleet of one hundred-fifteen (115) hopper barges, thirteen (13) towboats and four (4) tank barges. We have been providing barge transportation services to Alabama shippers for fifty (50) years.

The Coosa-Alabama is important to the economic well-being of Alabama. A wide variety of items are shipped by barge on the Coosa-Alabama, including not only agricultural commodities, but also iron and steel articles, petroleum and chemical products, paper and forest products, and sand and gravel, just to name a few. This diversification clearly indicates the broad economic impact that this waterway has on the health of business and commerce in Alabama.

There is a continuing need to improve the reliability and efficiency of the river channel. As a member of the Coosa-Alabama River Improvement Association, I request that you continue to adequately fund the operational and maintenance requirements of this River.

I respectfully oppose any increases in user fees, segment fees, or cost sharing. Increases in freight rates from any cause, whether it be from more user fees, segment fees, etc. lessen the competitiveness of barge transportation and thus the benefits that it provides for many industries. Any efforts that can be made to keep freight rates as low as possible will be rewarded with increased trade and industrial growth in our region.

Sincerely,

Tim Parker, Jr.

Tim Parker, Jr.

TPJ/nd

500 Broad St.
Camden, AL. 36726
April 14, 1986

Honorable Tom Bevill, Chairman
House Committee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

As the first Resource Manager for Alabama River Lakes, and as a resident of Camden, Alabama for 17 years, I have witnessed the development of the Government facilities, the industrial growth and the residential construction along the Alabama River. Although I retired after the completion of the park facilities on R. E. "Bob" Woodruff Lake, I retain a firm interest in the Alabama River development as well as the ultimate plans for the Coosa River and the maintenance of the Carters and Allatoona Projects. I support the Coosa-Alabama River Improvement Association's requests for FY87.

It is tantamount that the training dikes below Claiborne Dam be improved and that the dredging profile be modified to accomodate the waterway traffic generated by the industrial growth evidenced by such concerns as Scott Paper Co., International Paper, Alabama River Pulp, MacMillan-Bloedel, Inc., Hammermill Paper and Union-Camp as well as Radcliff Materials and Agricultural Services Corp.. Recently several smaller gravel producers have been started near Selma. These investors have made commitments of very large sums in their plants and holdings. MacMillan-Bloedel recently completed a 248 million dollar expansion of which 42 million was spent for air and water pollution control measures alone. Hammermill is making a comparable addition to its plant. Maintenance of the channel from Mobile to Montgomery is an obligation made to these users and to the public before impoundment. The contimued operation of the waterway must be assured to these and other users.

The Alabama River Lakes project has seen the initial phase of its recreational facilities completed with the opening of Gunter Hill Park on R. E. "Bob" Woodruff Lake. This contains 147 campsites with water and electrical services for campers and the Government realizes a substantial income from fees for the same. Further, 4 parks on Claiborne and Dannelly Lakes are being rehabilitated to include similar services to produce revenues. Needless to say, the powerhouses at Millers Ferry, Robert F. Henry, Carters and Allatoona Dams produce sizable returns for the U. S. Government. These facilities, as well as the navigable waterway, should be kept in operation.

I trust that your committee will act favorably on the appropriation requests of the Coosa-Alabama River Improvement Association, Inc..

Respectfully,

Robert M. Creswell

atrc
GBEE R NAL CO SSION
GEORGE F. ALFORD JR.
EXECUTIVE DIRECTOR
POST OFFICE BOX 269 CAMDEN, ALABAMA 36726
TELEPHONE (205) 682-4234

March 27, 1986

Honorable Tom Bevill
Chairman
House Subcommittee on Appropriations
  for Energy and Development
HOUSE OF REPRESENTATIVES
Washington, D.C.   20510

Dear Mr. Chairman:

I am sorry that I am unable to appear in person today before this distinguished subcommittee. However, I appreciate the opportunity to submit a statement on behalf of the Coosa-Alabama Improvement Association, Incorporated.

The Alabama-Tombigbee Regional Commission is a multi-county planning and development commission in southwestern Alabama. Its member governments include 10 counties and 47 municipalities, and a population of 225,600 residents of which 51% is Black. Our communities are small, with all but one under 7,000. Our per capita income in 1982 ranged from a low of $5,490 to a high of $7,800, considerably below the state average of $8,647. Our median family income in 1980 ranged from $9,983 to $15,623.

The major reason for construction of the Coosa River Navigation Project is to afford an opportunity for improvement of the shipment of goods, both raw materials and finished products by water. In turn, the waterways lower truck and rail rates by providing a competitive alternative for shippers. However, due to the lack of construction funds needed, this project was suspended in March, 1983. The appropriation of these funds by Congress is all that is needed to resume the design and construction work which is so badly needed on the Coosa Project.

Our state and nation are suffering from unprecedented unemployment rates. The Alabama-Tombigbee Regional Commission's region along had a 1985 unemployment rate of 12.1%. Federal investments that create jobs are needed as much as Federal job-training programs for jobs that may not exist. This would help to alleviate the dire need for employment opportunities in our region and state. Any plans for construction should include rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne and the continued maintenance and operation of the

Alabama River waterway from Mobile to Montgomery. It is also of paramount importance that the Mobile Harbor is maintained and improved.

Support for these projects by this Subcommittee is desperately needed. We at the Alabama-Tombigbee Regional Commission are part of a collective effort to maintain and extend the waterway. The potential this project offers our region is tremendous. We urge Congress to realize the need for and support the Coosa-Alabama River Improvement Association's request for Fiscal Year 1987 funding.

Sincerely,

ALABAMA-TOMBIGBEE REGIONAL COMMISSION

George F. Alford, Jr.
Executive Director

GFAjr:lsc

SOUTHEAST ALABAMA
ECONOMIC DEVELOPMENT AGENCY
P.O. BOX 1-TSU • TROY, ALABAMA 36082 (205)566-2153
Anthony H. Warner, III
EXECUTIVE DIRECTOR

March 12, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

The Southeast Alabama Economic Development Agency supports the Coosa-Alabama River Improvement Association, Inc. in their request for FY '87 and as a development agency we are in support of maintaining and extending this waterway. Of particular interest to my agency is the continuation of federal maintenance and operation of the Alabama River waterway from Mobile to Montgomery and the increase in money allocated to maintain and improve the Mobile Harbor.

Due to the extensive commitments made to private firms by industrial developers in the state of Alabama, it would be a drastic mistake not to continue the federal maintenance and operation of the waterways.

Thank you for your consideration.

Sincerely,

Tony

Anthony H. Warner, III
Executive Director

AHW:pst

Building the future today

MONROE COUNTY COMMISSION

MEMBERS
SILAS G. TUCKER
DISTRICT 1
AUBREY KILPATRICK
DISTRICT 2
ANNA RUTH MELTON
CLERK

Monroe County
JUDGE OTHA LEE BIGGS, President
Monroeville, Alabama 36460

ALLEN BIGGS
ACTING COUNTY ENGINEER

MEMBERS
FRANK DEES
DISTRICT 3
F. S. STEELE
DISTRICT 4
DR. W. H. HINES
PURCHASING AGENT

March 31, 1986

Hon. Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

The Monroe County Commission, Monroe County Alabama, respectfully submits to you its continued support for the development and maintenance of the Coosa-Alabama River System.

We support the Association's request for Fiscal Year 1987 funding as the total economic benefits to the southeastern region of the United States will not fully be realized until the Coosa-Alabama Rivers are fully developed and navigable from Rome Georgia to Mobile Alabama.

We specifically request that the design and engineering work on the Coosa Project, which was suspended in 1983, be resumed. We further request that rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne be continued, for proper and uninterrupted navigation to accomodate the industries already located along this river system.

Studies of completed waterways such as the Arkansas, and also of the planned Coosa Project show that the returns fully justify the investment.

We therefore respectfully request that favorable consideration be given to all of the recommendations for funding for Fiscal Year 1987 for the eventual completion of this most important and much needed river system.

Respectfully submitted,

MONROE COUNTY COMMISSION
MONROE COUNTY ALABAMA

Otha Lee Biggs
Otha Lee Biggs, President

OLB:ers

CITY OF MONROEVILLE

B. C. HORNADY
MAYOR
MARY S. MYRICK
CITY CLERK
(205) 575-2061

POST OFFICE BOX 147
MONROEVILLE, ALABAMA 36461

COUNCILMEN:
RAYMOND BAYLES
J. R. JOHNSON
JIM DAVIS
W. B. OWENS
[illegible]
Anne H. Farish

April 1, 1986

Hon. Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

The Monroeville City Council, Monroe County, Alabama, respectfully submits to you its continued support for the development and maintenance of the Coosa-Alabama River System.

We support the Association's request for Fiscal Year 1987 funding as the total economic benefits to the southeastern region of the United States will not fully be realized until the Coosa-Alabama Rivers are fully developed and navigable from Rome, Georgia to Mobile, Alabama.

We specifically request that the design and engineering work on the Coosa Project, which was suspended in 1983, be resumed. We further request that rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne be continued, for proper and uninterrupted navigation to accomodate the industries already located along this river system.

Studies of completed waterways such as the Arkansas, and also of the planned Coosa Project show that the returns fully justify the investment.

We, therefore, respectfully request that favorable consideration be given to all of the recommendations for funding for Fiscal Year 1987 for the eventual completion of this most important and much needed river system.

Respectfully submitted,

MONROEVILLE CITY COUNCIL
MONROE COUNTY, ALABAMA

B. C. Hornady
B. C. Hornady, Mayor

BCH/mm

Monroeville Area
Chamber of Commerce

P.O. BOX 214
MONROEVILLE, AL 36461
(205) 743-2879

April 1, 1986

Hon. Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

The Monroeville Area Chamber of Commerce, Monroe County Alabama, respectfully submits to you its continued support for the development and maintenance of the Coosa-Alabama River System.

We support the Association's request for Fiscal Year 1987 funding as the total economic benefits to the southeastern region of the United States will not fully be realized until the Coosa-Alabama Rivers are fully developed and navigable from Rome, Georgia to Mobile, Alabama.

We specifically request that the design and engineering work on the Coosa Project, which was suspended in 1983, be resumed. We further request that rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne be continued, for proper and uninterrupted navigation to accomodate the industries already located along this river system.

Studies of completed waterways such as the Arkansas, and also of the planned Coosa Project show that the returns fully justify the investment.

We therefore respectfully request that favorable consideration be given to all of the recommendations for funding for Fiscal Year 1987 for the eventual completion of this most important and much needed river system.

Respectfully submitted,

Monroeville Area Chamber of Commerce
Monroe County Alabama

Jimmy Tucker
Jimmy Tucker, President

JT: gfb

"The Hub of Southwest Alabama"

TATE, HEINZ & ELLIS, INC.
Insurance & Real Estate
403 BROAD STREET, P. O. BOX H, SELMA, ALABAMA 36701
(205) 872-7444
(205) 875-7261

March 28, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman,

Again after a quarter of a century we are making a request at our meeting with you in Washington on April 14, 1986 for your continued support of our Great River System. We have more rivers in Alabama than any other state in the Union and we need your help.

The Coosa-Alabama in our opinion is one of the most important in the Nation. It is serving from North to South and carrying goods from foreign ports to our State.

The engineers had us to make a request of the State of Alabama to contribute to this great system and they have agreed to do so when you give us the go signal. We know you will give your best efforts to the Great Project.

Sincerely yours,

Chris B. Heinz

our 80th year of service

MONTGOMERY COUNTY COMMISSION
P. O. BOX 1667
MONTGOMERY, ALABAMA 36192-2501
(205) 832-1210

JOEL W. BARFOOT, CHAIRMAN
FRANK A. BRAY
WILLIAM F. JOSEPH JR.
JOHN F. KNIGHT, JR.
MACK MCWHORTER

A COUNTY OLDER THAN THE STATE
ESTABLISHED 1816

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

The Montgomery County Commission continues to closely follow the development of the Coosa-Alabama River project which was originally authorized by the Congress in 1945. We believe that the benefits which accrue to the citizens of this region, and to the nation, fully justify the complete construction and operation of this economical waterway.

We fully support the testimony provided by the Coosa-Alabama River Improvement Association. For many years this group has represented us and they accurately reflect our feelings of support for this waterway project.

Of particular interest to us is funding which would permit resuming the design and engineering work on the Coosa Project, which was suspended in 1983.

Also, we feel that the requested appropriation to continue the operation and maintenance of the upstream reservoirs and hydropower plants at Allatoona and Carters Lake in Georgia is essential for the continuity of this project.

We urge your favorable consideration of the recommended appropriations. Adequate funding as requested is necessary to insure that progress is made for further development of the system and to properly operate and maintain the existing portion. Similar information has been sent to Honorable Mark Hatfield, Chairman, Subcommittee on Appropriations for Energy and Water Development, United States Senate, regarding this matter.

Sincerely,

Joel W Barfoot

Joel W. Barfoot
Chairman

JWB/el

cc: Mr. Ralph O. Clemens, Jr., Executive Vice President
Coosa-Alabama River Improvement Association, Inc.

UNION BANK & TRUST CO.
60 COMMERCE STREET
POST OFFICE DRAWER 2191
MONTGOMERY, ALABAMA
36197-5401

HENRY A. LESLIE
PRESIDENT
—
CHIEF EXECUTIVE OFFICER

205-265-8201

April 14, 1986

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Tom:

I am writing to you to express my support of the Coosa-Alabama River Improvement Association's request for Fiscal Year 1987. This Institution has been a member of the Association for many years and we are vitally interested in the collective effort to maintain and extend the waterway.

The information available on waterways continue to support the fact that waterways, such as the Coosa-Alabama River Project, provide efficient transportation, which in turn lower inflation and contribute to reduction of the national deficit.

We solicit your help to continue Federal maintenance and operation of the Alabama River waterway from Mobile to Montgomery. Extensive commitments to private investment on navigable waterways have been made on the assumption that Federal maintenance and operation of the waterways would be continued.

We will appreciate your favorable consideration of the Association's request.

Sincerely yours,

Henry A. Leslie
President

HAL/gb

Anne Tidmore Flags, Inc.
P.O. Box 11121 • Montgomery, AL 36111 • (205) 269-1776
FLAGS & FLAGPOLES

March 24, 1986

Anne Tidmore, *President*

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Devlopment
House of Representatives
Washington DC 20515

Dear Congressman Bevill:

I am writing to say that I support the CARIA requests for FY87 and I am proud to be a part of this important effort to maintain and extend our waterway here in Ala.

I would ask that you might undertake the following matters: 1. to resume the design and engineering work on the Coosa Project; 2. that you would allow the rehabilitation of the training dikes and dredging on the channel below Claiborne to continue; 3. That you would see that Federal maintenance and operation of the Ala River waterway from Mobile to Montgomery continues; and that you will generally support the program.

As you know studies have indicated that the returns fully justify the investment on the Coosa Ala. We appreciate your support in the past and look forward to a favorable report from the group when they return from Washington.

Sincerely,

Anne Tidmore

Anne Henry Tidmore

MACK YEARGAN, Chairman

P. O. BOX 557
CLANTON, ALABAMA 35045

COMMISSION MEMBERS
GEARLD (BUCK) COST, Dist. 1
Route 2, Box 87-A, Jemison, AL 35085
QUINTON R. CUMMINGS, Dist. 2
Route 2, Box 236, Maplesville, AL 36750
A. WAYNE CLECKLER, Dist. 3
Route 3, Box 276, Clanton, AL 35045
VIRGIL O. EASTERLING, Dist. 4
Route 8, Box 346, Clanton, AL 35045

MARGIE E. HEADLEY, Administrator
DUANE DUNN, County Engineer
JOHN HOLLIS JACKSON, JR., Attorney

April 2, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

The Chilton County Commission is on record in support of the Coosa-Alabama River Improvement Assn., Inc. request for funding for FY87. We are part of the collective effort to maintain and extend the waterway.

Hopefully, the Mobile Harbor will be improved and eventially, the Coosa River project resumed.

Chilton County's economy, as well as the State and Nation, will be greatly affected by the continuation of this project.

Yours very truly,

Mack Yeargan
Mack Yeargan,
Chairman

The Anniston Star
"Alabama's Largest Home-Owned Newspaper"
P. O. BOX 189 • PHONE 236-1551
ANNISTON, ALABAMA 36202

PHILLIP A. SANGUINETTI
PRESIDENT

April 14, 1986

The Hon. Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, DC 20515

Dear Congressman Bevill:

Although Anniston is not on the Coosa River per se, we have always felt that the river development would be a great asset to the county, the state and the nation.

Our newspaper has supported this activity for more than 50 years. We further must support the Coosa-Alabama River Improvement Association, Inc., request for FYI 87. This is part of a collective effort to maintain and extend the waterways. We should also resume design and engineering work on the Coosa project, which was suspended in 1983.

Further, we should continue rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne. We also should continue to maintain and improve Mobile Harbor.

Further, extensive commitments to the private investment on navigable waterways have been made on the assumption that federal maintenance and operation of the waterways would be continued and, as stated before, the public policy decision to invest in an underdeveloped region like the Coosa Valley would strengthen the nation as a whole.

Thanks for your assistance in this matter.

Very truly yours,

Phillip A. Sanguinetti

Phillip A. Sanguinetti

PAS:bjh

the City of
Gadsden
BOX 267 / 35999 ALABAMA

STEVE MEANS Mayor
GEORGE SIZEMORE Commissioner
TONY REYNOLDS Commissioner

April 14, 1986

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

I plan to attend the upcoming budget hearings in Washington on April 14 and appreciate the opportunity to support the Coosa River Action Council in their efforts to make the Coosa navigable.

The development of the Coosa River is one of the keys to the economic growth of Gadsden and the Etowah County area. An efficient waterway system will greatly reduce our unemployment and enhance the development of our natural resources.

We have confidence that your committee will see fit to fund the design and engineering work on the Coosa River Project. I thank you for your consideration in this matter.

Sincerely,

Ray Hutchison
Administrative Assistant
to the Mayor

/s

"The City of Champions"

GADSDEN
ETOWAH
CHAMBER OF COMMERCE

March 19, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

Attached is a statement submitted for the official record of your budget hearings on the Coosa-Alabama River project.

Thank you for the opportunity to participate in the process.

Sincerely,

Robert C Douglass, Jr

Robert C. Douglass, Jr.
Executive Vice President

P.O. Box 185 • 400 Walnut Street • Gadsden, Alabama 35902 • (205) 543-3472

GADSDEN
ETOWAH
CHAMBER OF COMMERCE

Statement
Before the
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives

by the
Gadsden-Etowah Chamber of Commerce
April 14, 1986

The Gadsden-Etowah County of Commerce, representing almost 800 businesses in Etowah County, encourages the full development of the Coosa River to realize the potential of northeast Alabama. As a member of the Coosa-Alabama River Improvement Association and as the administrative agency of the Coosa River Action Council, the Chamber supports the maintenance and extension of the entire Coosa-Alabama waterway. We strongly urge that funding for the entire project be included in the 1987 fiscal year budget, and particular ask for the resumption of the design and engineering work on the Coosa Project.

As you may know, the economy of our region has been hard hit during the past four or five years. The unemployment rate in January, 1986, was 10.1%, significantly above the national average of 6.7%. Although, economic conditions are now improving, we have a long way to go. A completed Coosa-Alabama Waterway Project will give an immeasurable boost to Etowah County, to the State of Alabama and to the nation. The Chamber is ready to assist both the state and federal government in making this waterway development a reality. Your consideration and action is needed--and it will be most deeply appreciated.

RESOLUTION

WHEREAS, the Congressional Appropriations Subcommittee hearings are scheduled for April 14, 1986, in Washington, D. C.; and

WHEREAS, representatives of the Coosa-Alabama River Improvement Association, Inc. will again testify in support of maintenance of the Alabama River as well as the Port of Mobile, along with other specific interests;

NOW THEREFORE BE IT RESOLVED That the St. Clair County Commission go on record in support of the Association's requests for FY87;

FURTHER, that copies of said resolution be forwarded to the Coosa-Alabama River Improvement Association, Inc., Montgomery; the Honorable Tom Bevill, Chairman, House Subcommittee on Appropriations for Energy and Water Development; and the Honorable Mark Hatfield, Chairman, Subcommittee on Appropriations for Energy and Water Development, United States Senate;

Adopted this 11 day of March, 1986.

ST. CLAIR COUNTY COMMISSION

James S Gallup
Chairman

Charles M
Member

Member

Paul M
Member

Member

ROME AREA CHAMBER of COMMERCE

424 BROAD STREET • POST OFFICE BOX 406 • ROME, GEORGIA 30161
PHONE 404/291-7663

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

We enclose a resolution from the Rome Area Chamber of Commerce in the interest of the continuing development on the Coosa-Alabama River System.

We acknowledge, with sincere appreciation, the wholehearted support and appropriations that have made it possible to plan, begin, and continue, construction on the system's projects.

We hold this program to be a splendid example of cooperation between the federal government and private power company development for the benefit of the entire Southeast.

Sincerely,

Bruce S. Schlosberg

Bruce S. Schlosberg
Executive Vice President

jw

Enclosure

ROME AREA CHAMBER of COMMERCE

424 BROAD STREET • POST OFFICE BOX 406 • ROME, GEORGIA 30161
PHONE 404/291-7663

- RESOLUTION -

WHEREAS, those counties lying within the basin of the Coosa-Alabama rivers are experiencing economic growth due to the current development program now underway on the rivers and feel this will accelerate even faster when the Coosa-Alabama waterway is fully navigable from Mobile, Alabama to Rome, Georgia: and,

WHEREAS, extensive commitments to private investment on navigable waterways have been made on the assumption that federal maintenance and operation of the waterways would be continued, and studies of completed waterways such as the Arkansas, and also of the planned Coosa Project, show that the returns fully justify such investment; and,

WHEREAS, waterways provide a competitive alternative for shippers, (rail rates on grain from the mid-West are already lower since opening the Tennessee-Tombigbee); lowered freight rates are in the national interest as manufacturers and farmers compete to improve our balance of payments;

WHEREAS, waterways provide efficient transportation productivity that lowers inflation and reduces national deficits; and,

WHEREAS, a public policy decision to invest in an underdeveloped region like the Coosa Valley would strengthen the nation as a whole; and,

WHEREAS, dynamic economic growth, increased hydropower and barge transportation facilities, a more productive way of life, as well as increased recreational enjoyment, are but a few of the numerous benefits that will accrue when this great system is developed;

NOW, THEREFORE BE IT RESOLVED, that the Rome Area Chamber of Commerce approves testimony by the Coosa-Alabama River Improvement Association for support of appropriations on the following projects:

(1) Resumption of design and engineering work on the Coosa Project which was suspended in 1983;
(2) Continued rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne;
(3) Continued federal maintenance and operation of the Alabama River waterway from Mobile to Montgomery;
(4) Continued operation and maintenance of the upstream reservoirs and hydropower plants at Allatoona Lake and Carters Lake, in Georgia;
(5) Maintenance and improvement of Mobile Harbor;

NOW, THEREFORE BE IT FURTHER RESOLVED, that we strongly urge appropriations representing the capability of the Corps of Engineers for Fiscal Year 1987.

Approved and adopted in regular session of the Board of Directors, this 27th day of March, 1986.

Ben Whittington
Ben Whittington, President

ACCREDITED

STATEMENT OF

ROBERT M. HOPE, DIRECTOR

ALABAMA STATE DOCKS DEPARTMENT

MOBILE, ALABAMA

BEFORE

THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT

WASHINGTON, D. C., APRIL 14, 1986

Good day Gentlemen:

On behalf of the Alabama State Docks Department and the Port of Mobile we appreciate the opportunity to appear before this Committee today and offer this statement in regard to Fiscal 1987 appropriation measures relative the Mobile Harbor.

The Alabama State Docks Department is the terminal facilities operator for the Port of Mobile and operates and maintains port handling facilities which include a Bulk Material Handling Plant, Public Grain Elevator, Export Coal Handling Terminal, general cargo facilities including wharves, piers and warehouses as well as a Terminal Railway. The Port complex entails approximately 1445 acres and is valued in excess of $500 million.

The primary cargoes handled through the Port of Mobile include inbound ores such as bauxite, manganese, magnesite, ilmenite, iron ore and steam coal. Grain exports include soybeans, corn, wheat, oats, middlings, and screenings. Coal for export constitutes a major cargo as well as outbound crude oil which moves to the Port from recovery operations in Florida and North Mobile County.

During the past ten years the Alabama State Docks Department and the State of Alabama have expended in excess of

$250 million on renovations, expansions and improvements to the Port handling capabilities at the Mobile facilities.

These funds have been expended to meet the required present cargo handling capability of tonnage generated by our in-place inland river system, the five trunk line railroads serving Mobile, and forty-five truck lines which initiate and terminate cargo in Mobile.

A complete Port renovation program impacting each of the four terminal operating facilities at Mobile has been completed and the Port's handling capability in all areas has been increased and that increased capability provided an emphasis for escalating tonnage at Alabama State Docks' facilities last year. Export coal handled through the McDuffie facilities increased by 1.5 million tons and export grain moving through the Public Grain Elevator increased by almost a million tons.

Programs which we have previously discussed with this Committee with respect to the acquisition of additional spoil disposal sites and subsequent diking improvements thereon have been completed while others are under contract at this time.

As Director of the Alabama State Docks Department I am supporting the Corps of Engineers Budgeted Allocation for Fiscal Year 1987 in the amount of $7.1 million for Operation and Maintenance functions in the Mobile Harbor for Fiscal '87 and respectfully request that this Committee approve that Budgeted Allocation.

The Alabama State Docks Department and the Governor of the State of Alabama jointly support the deepening of Mobile Harbor to a depth of fifty-five feet to accommodate the very large bulk carriers under the MOBILE HARBOR DEEPENING AND IMPROVEMENT PROGRAM.

The Alabama State Docks Department, the State of Alabama, and the U. S. Army Corps of Engineers have jointly planned an environmentally sound and economically feasible phased approach to the new construction project.

The Project authorized in Public Law 99-88 permits a phased development of the Project Deepening and the Alabama State Docks, State of Alabama and the Corps of Engineers are proposing to commence the initial phase of work which will include the construction of a new turning basin and additional anchorages on the Mobile River at the confluence of Mobile River and Mobile Bay just east of the McDuffie Island Export Coal Terminal.

This initial phase of work will be extremely timely to the project and will offer immediate benefits for the turning and handling of bulk cargo vessels at the south end of the Harbor facilities.

We would respectfully request this Committee to approve the Budgeted Allocation for new work of $15 million set out in the Fiscal 1987 Budget for Mobile Harbor.

We again appreciate the opportunity to appear before this Committee and voice our support in concert with that of Governor George C. Wallace for the requested Budgeted Allocations as well as this Committee's continued cooperation with the U. S. Army Corps of Engineers with respect to the Mobile Harbor Projects.

We respectfully request that this statement be incorporated in and made a part of the permanent record of these Hearings.

Vulcan Materials Company

SOUTHERN DIVISION / P. O. BOX 7324-A • BIRMINGHAM, ALABAMA 35253 • TELEPHONE 205 877-3703

DON L. HARRELL, JR.
MANAGER SALES ADMINISTRATION

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Representative Bevill:

We strongly support the testimony and funding requests of the Coosa-Alabama River Improvement Association. We join in the regional effort to improve and extend the Alabama-Coosa Waterway. We feel that there is an immediate need to extend the commercial navigation channel from Montgomery to Gadsden, Alabama. The extension of the river system to Gadsden will not only benefit an area that has been extremely hard hit by a depressed economy, but will take advantage of the lower costs, energy efficient barge transportation. We estimate that we would ship between 100,000 and 300,000 tons of crushed slag and stone from our Gadsden plants to the Montgomery and south markets, if the river were navigable.

The Alabama River has proven to be a good investment. We feel that the money needed in the operations and maintenance area, to complete the rehabilitation work on the training dikes and the new dredging, is essential in order to improve the channel's reliability and to help the Alabama River reach its designed potential. Waterways provide efficient transportation productivity that in turn lowers inflation, and we need to utilize our given resources to the betterment of the people of our nation. The completion of this project will be an investment in the future of our region and nation.

Sincerely,

Don L. Harrell, Jr.

Don L. Harrell, Jr.

Montgomery area Chamber of Commerce
41 COMMERCE STREET • P. O. BOX 79 MONTGOMERY, ALABAMA, 36101 • 205-834-5200

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

As you are aware the Montgomery Area Chamber of Commerce has, since 1890, strongly supported the development of the Coosa-Alabama River System because we have always believed that such development is vital to the cultural, industrial and economic development of Alabama and the southeastern United States. Today with the rapid total development of the whole "sunbelt" area this need is greater than ever before.

Studies have been made and presented which fully justify the beliefs we have held and show the array of benefits, never before possible, which will result from the total utilization of this great river system.

We are well aware of and are most grateful for your strong support of this project and request that you and your committee approve the appropriations requested for the Coosa-Alabama River System for the FY87. We will be most grateful for your continued support for this most important worthwhile project.

Sincerely,

Thomas L. Blake
Executive Vice President

/ld

C. GRAY PRICE
Mayor

JERRY SIMS
Administrative Assistant

RUBYE E. KENNEDY
City Clerk-Treasurer

CITY OF PRATTVILLE
P.O. DRAWER 20
TELEPHONE (205) 365-9967
101 WEST MAIN STREET
PRATTVILLE, ALABAMA 36067-0020

E. T. WALROND
WILTON C. MOATES
MALCOLM D. SMITH
GEORGE P. WALTHALL, JR
WILLIAM W. GILLESPIE
City Council

April 7, 1986

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for
Energy and Water Development
House of Representatives
Washington, DC 20515

Dear Representative Bevill:

I strongly endorse the goals of the Coosa-Alabama River Improvement Association, Inc. as will be presented in their testimony before your committee.

The future industrial development of a large part of Alabama depends upon continuation of this project. As our city and county are located adjacent to the Alabama River, I am sure that you can understand my concern for and support of this undertaking.

Our citizens would appreciate any assistance you can give to this enterprising and much needed endeavor.

Sincerely,

C. Gray Price

C. Gray Price
Mayor

CGP/mar

CHEROKEE COUNTY COMMISSION

REGULAR MEETING 2nd & 4th MONDAY
CHEROKEE COUNTY COURTHOUSE ANNEX
EQUAL OPPORTUNITY EMPLOYER
205-927-3668
CENTRE, ALABAMA 35960

RALPH A. MEADE
President

CAROLYN SMITH, Co. Administrator
BARBARA O'NEAL, Clerk
BENNIE YOUNG, Clerk

H. DEAN BUTTRAM, JR.
ROBERT D. McWHORTER, JR.
County Attorneys

RICKY STALLINGS, Dist. 1
CHARLES YOUNG, Dist. 2
TOMMY MILLER, Dist. 3
JOHN GIBBS, Dist. 4

April 14,1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

The Cherokee County Commission request your favorable consideration be given the Coosa River project which extends from Rome, Georgia through Alabama. This river flows through Cherokee County and we feel it would be very beneficial to area industry and farmers to have this waterway improved. Navigable waters would be both convenient and economical and would help manufacturers and farmers compete to improve our balance of payments.

Again we request your help in resuming designing and engineering on this project and other projects in our State, the Southeast and the Nation.

Sincerely,

CHEROKEE COUNTY COMMISSION

Ralph A. Meade

Ralph A. Meade
President

RAM/cms

The Crappie Capitol of The World — 33,000 Acres of Water Wonderland

Centre, Alabama
April 4, 1986

Honorable Tom Bevill
Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

I am very much in support of the Coosa-Alabama River Improvement Association's request for FY87, and I am a part of a collective effort to maintain and extend the waterway.

One particular area that I would like to see resumed is the design and engineering work on the Coosa Project that was suspended in 1983. I would also like to see the improvement and maintenance of the Mobile Harbor.

Since the waterways provide a competitive alternative for shipping, this would really help our overall economy. The freight rates would be lowered and are in the national interest as manufacturers and farmers compete to improve our balance of payments.

We appreciate all of your efforts concerning this project.

Very truly yours,

James T. Jordan

James T. Jordan

COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, inc.

1201 UNION BANK BUILDING
MONTGOMERY, ALABAMA 36104
(205) 265-5744

RALPH O. CLEMENS, JR.
EXECUTIVE VICE-PRESIDENT

OFFICERS

LISTER H. PROCTOR
PRESIDENT
SYLACAUGA, ALABAMA

B. H. MOONEY
VICE-PRESIDENT
ROME, GEORGIA

MARY GEORGE WAITE
VICE-PRESIDENT
CENTRE, ALABAMA

W. S. BREWBAKER
SECRETARY-TREASURER
MONTGOMERY, ALABAMA

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

The attached letter from Scott Paper Company, Natural Resources Division, Saraland, Alabama was forwarded to this Association. Please include this letter in the record to support the testimony of this Association.

Sincerely,

Ralph O. Clemens, Jr.
Executive Vice President

ROCjr/ap

Enclosure

SCOTT
P. O. Box 899
Saraland, AL 36571

April 2, 1986

Mr. Ralph Clemens
Coosa-Alabama River Improvement Association
1201 Union Bank Building
Montgomery, AL 36104

Dear Mr. Clemens:

Scott Paper Company appreciates the opportunity to submit a statement on our use of the Alabama River system. Water transportation of raw materials is of great importance to our company and will be even more so in the future. Decisions of this Committee will therefore be very important to our company's future operation, profitability, and employee work force. Failure to provide for dredging and other projects on the Alabama River system could increase our company's operating costs to the detriment of the economy of Alabama and its citizens.

Scott Paper Company in Alabama manufactures lumber, pulp and a wide variety of paper products which are shipped to markets throughout the United States. The payroll for our 4,000 employees in the Mobile, Alabama, area is $110 million annually. Scott's operation in the Mobile area contributes over $1 million per day to the economy through payroll, taxes, and purchase of pulpwood and supplies.

Water transportation is used in Scott's Alabama operation to move raw material - pulpwood and logs - to manufacturing plants.

We have used water transportation of wood raw materials on the Alabama River system for a number of years and are currently upgrading and enlarging our water transportation capabilities. Our $70 million dollar investment in 1982-83 has resulted in lower operating costs which, in turn, has improved the competitiveness of our Alabama operations. We are currently barging approximately 800,000 tons of wood on the Alabama River system to our Mobile, Alabama, manufacturing plants. The $70 million investment included modernization of our Camden and riverbank woodyards and the Mobile woodyard and firststage processing equipment. We now operate ten towboats and sixty-four barges. Forty percent of our raw material is being delivered on the Alabama River system. Since last year we have completed a new bargeyard at Dixie Landing (Mile 27) and modernized our existing bargeyard at Canton Bend (Mile 149). We have completed construction of a 2800 horsepower towboat.

With this additional $3.2 million investment in new water transportation facilities, it is obvious that a well-maintained Alabama River system is critical to our company's future. Failure of the U. S. Army Corps of Engineers to dredge and carry out other projects on the Alabama River system could result in higher transportation costs and negative economic pressures on the company, the economy of Alabama, and the 4,000 Scott employees.

We urge the Committee to provide adequate funding for the Alabama River system and Mobile, Alabama, harbor.

Sincerely,

R. A. Burk, Jr.
River Region Manager

RAB:caj

City of MONTGOMERY Alabama

EMORY FOLMAR
Mayor

MONTGOMERY CITY COUNCIL

MRS. ALICE D. REYNOLDS-Pres.
E.T. (BUD) CHAMBERS-Pres. Pro tem
HERCHEL CHRISTIAN
JOSEPH DICKERSON
MARK GILMORE, JR.
LEU HAMMONDS
WILLIAM (BILL) NUNN, III
JOE L. REED
BILLY M. TURNER

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

Over the years, the City of Montgomery has actively supported the development of the Alabama-Coosa River system. A navigable Alabama river opens doors to international trade through the Port of Mobile. Additionally, the benefits of low-cost barge transportation will help assure the prosperity of industrialized communities when we extend the present channel up the Coosa River.

I fully support any and all efforts to reduce Federal spending to the point necessary to control the huge Federal deficit and, therefore, I ask that you fund the Alabama-Coosa River system to the extent you are capable, consistent with other national needs.

Sincerely,

Emory Folmar

Emory Folmar
Mayor

EF/edm

P.O. BOX 1111, MONTGOMERY, ALABAMA 36192

STATE OF ALABAMA
GOVERNOR'S OFFICE
MONTGOMERY 36130

April 14, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Appropriations for
Energy and Water Development
United States
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

It is a privilege and a pleasure to address this Subcommittee, along with the members of the Coosa-Alabama River Improvement Association, in support of navigation on the Alabama-Coosa River Waterway. Specifically, we endorse the request of the Association and its supporters for continued funding during FY 87 of navigation on the Alabama River. We wish to again express our strong support for the full-time operation and the necessary maintenance of the Alabama River portion of the waterway.

The Alabama River provides a vital link into the heartland of Alabama, connecting the Montgomery area to the Gulf Port of Mobile, and to other waterways of our National Inland Waterway System. It provides a dependable, safe and cost-effective method of transportation of materials and products, both industrial and agricultural, as well as providing jobs and opportunities for many of Alabama's citizens.

I support the Association's funding request for FY 87 for the various projects along the Alabama-Coosa River Waterway. I support the Association's request for funding the Alabama-Coosa River Project in the amount of $10,343,000. This funding is over and above what is needed for regular operation and maintenance expenditures. These extra funds are needed to continue rehabilitation work to improve the reliability of the 9-foot channel during dry seasons in the lower reaches of the Alabama River. Preliminary work was begun during FY 85 but was delayed. With the Association's recommended level of funding, the Corps of Engineers should be able to complete this work on schedule during FY 87. I also support the Association's request for funding Millers Ferry Lock and Dam ($4,336,000) and Robert F. Henry Lock and Dam ($3,448,000).

Also, at the appropriate time, we request your support for the resumption of design and engineering work on the Coosa River Navigation Project which was deferred in 1983. We still believe this project to be of vital importance to Alabama and the entire region. When completed it will no doubt benefit the regional development potential of the area. During 1984 and 1985, action at the State level removed several obstacles to this project. I commend the members of the Alabama Legislature for passage of legislation in 1984 which amended several technical aspects of the Coosa Valley Development Authority, the nonfederal sponsor of the Coosa River Navigation Project. Last year legislation was passed by the Alabama Legislature providing adequate State funding for the project as recommended by the Corps of Engineers in their earlier reports. In addition, I authorized creation of the Alabama Waterways Development Agency in 1985 to promote the development and utilization of all Alabama waterways. My representatives have also been involved in the formation of the Gulf States Intracoastal Waterway Coordinating Committee, along with representatives of the states of Florida, Louisiana, Mississippi, and Texas, to provide a forum for discussion of issues and opportunities related to the utilization of the Gulf Intracoastal Waterway.

Also, I support adequate funding for the operation and maintenance of Mobile Harbor. Mobile Harbor is vital to the ongoing operations of the Port of Mobile and the Alabama-Coosa River Waterway. Over the past eight years the State of Alabama has invested over $250 million in expanded and improved port facilities.

In closing, I would like to pledge my support and again express the intentions of the State of Alabama to adequately meet its responsibilities and obligations for the Alabama-Coosa River Waterway as defined by Congress. I would also like to express thanks to you and to all the members of the Subcommittee, whose support and assistance over the years has insured that adequate funding is provided for the operation and maintenance of the navigation on the Alabama River, and for the progress achieved thus far on the proposed Coosa River Navigation Project.

Sincerely,

George C. Wallace

George C. Wallace

GCW/adt

ROBERT (BOOLEY) HITT
Chairman
H. J. MARTIN, JR.
Administrator

ASSOCIATE MEMBERS
WENDELL BRYANT
District 1
BILLY RAY McKEE
District 2
JESSE BURNS
District 3
W. A. LUTES
District 4

ETOWAH COUNTY COMMISSION
Gadsden, Alabama 35901
Telephone 205/546-2821

April 11, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

On behalf of the Etowah County Commission, I would like to take this opportunity to express my wholehearted support of the Coosa River Navigation Project, and would like to see this project completed as soon as possible.

This project would give a tremendous boost to our already sick economy by creating employment, as well as future employment benefits. When completed, the State of Alabama as well as others will greatly benefit from this project.

I feel that at this time, we cannot afford to miss this opportunity to invest in the future of our country's citizens and it's lands.

Thank you for your attention in this matter,

Sincerely,
Robert V. Hitt, Chairman

Wendell Bryant, Associate Commissioner,District No. 1
Billy R. McKee
Billy Ray McKee, Associate Commissioner,District No. 2
Jesse F. Burns
Jesse Burns, Associate Commissioner,District No. 3
W. A. Lutes
W. A. Lutes, Associate Commissioner, District No. 4

RVH:ad

Ms. **Waite**. I also request you enter into the record our list of delegates who are with me today and are back here backing me up so I can go on with this.

Mr. **Bevill**. Without objection, their names of each of those present who came here at their own expense and left their businesses and their business schedules to come here in support of their project, that will be noted in the record.

[The information follows:]

COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, inc.

1201 UNION BANK BUILDING
MONTGOMERY, ALABAMA 36104
(205) 265-5744

RALPH O. CLEMENS, JR.
EXECUTIVE VICE-PRESIDENT

OFFICERS

LISTER H. PROCTOR
PRESIDENT
SYLACAUGA, ALABAMA

B. H. MOONEY
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MARY GEORGE WAITE
VICE-PRESIDENT
CENTRE, ALABAMA

W. S. BREWBAKER
SECRETARY-TREASURER
MONTGOMERY, ALABAMA

April 14, 1986

To: House Appropriations Subcommittee on Energy and Water Development

Subject: Witness List; Coosa-Alabama River Improvement Association, Inc.

April 14. 1986

Mrs. Mary George Waite - Vice President Coosa-Alabama River Improvement Association, Inc. Centre, Alabama

Mr. William Griffin - Representing Alabama Governor Wallace - Director, Alabama Waterways Development Agency, Mobile, Alabama

Mr. J. T. McKenzie - President, Coosa River Action Council, Gadsden, Alabama

Representative Bobby Junkins - Vice Chairman, Joint Interim Legislative Committee on Coosa River Navigation Project, Gadsden, Alabama

Representative Richard Lindsey - Member, Interim Legislative Committee, Centre, Alabama

Colonel Ralph O. Clemens, Jr. - Executive Vice President, Coosa-Alabama River Improvement Association, Inc., Montgomery, Alabama

Mr. MYERS. Will they stand up, Mr. Chairman, so those of us who don't know you——

Ms. WAITE. There are 45 of us, so everybody stand up.

Mr. MYERS. What is the name of the youngest girl?

Ms. WAITE. Grace.

She came all the way from Camden. We have judges, chairmen and members of county commissions, members of chambers of commerce, mayors—we have a gal mayor sitting back there—and Alabama State legislators.

We have key governmental staff people. We have corporate users of the waterway, and we have a significant group of people that really want to support this unique opportunity for serving their communities.

So, they have stood and been recognized, and now you know who we are, and we thank you so much. Our written statement bears the main thrust of our testimony. We are asking for an increased level of funding for operations and maintenance proposed for the products that we do support.

We are particularly concerned that maximum funding be applied to continue rehabilitation work on the lower Alabama River, and that work was started in Fiscal Year 1985.

The project, of course, has been plagued by some delays involving processing, environmental requirements, and then, of course, we know about Gramm-Rudman and we know about the budget situation in Washington, but we know that with your dedication that you are going to work things out.

We feel that this time may be a little bit premature to request construction funds for the Coosa project, but nonetheless, we are encouraged by what appears to be an increase in business of some of our key industries in our State.

Given the facts that no major river construction development has begun since 1980, that national economy seems to be continuing its expansion, that the State of Alabama is supportive of our project to the extent of formally identifying State funds for the Coosa project—and you will hear a little bit more about that in a moment—that it does not seem totally unrealistic to say that the time may be near to open serious discussions regarding completing preconstruction requirements for our project.

At this time you are going to hear, in turn, from one of our very, very fine representatives in the House in Alabama who is the Vice Chairman of the Joint Interim Legislative Committee on the Coosa River Navigation Project, Representative Junkins.

And then next to Representative Junkins, and you will hear from him, is another member of that committee who is also a very fine, young, intelligent representative, Richard Lindsey from Cherokee County, and then also Executive Vice President Ralph Clemens will say a brief word.

Then seated behind him we have Tom McKenzie who is President of the Coosa River Action Committee, Mr. Chairman, from Gadsden, Alabama.

Then we have Buddy Griffin who is representing Governor Wallace. So, Buddy might want to come up, too.

Mr. BEVILL. I would like to endorse what Mary George has said about our two State representatives that are here today. They are two very outstanding representatives, and we all appreciate both of them.

So, since there is an old saying up here, "The light bulbs are distributed on the basis of senority," Bobby, the Chair will recognize you first.

Mr. **Junkins**. Thank you, Mr. Chairman, members of the committee. It is a pleasure to be here and also to represent an area that is a highly industrial area.

One of the plights of industry today is foreign subsidized steel that is coming in and putting many of our workers out of work.

Foreign tubes are coming in in our tire industry and killing us. Every bit of money that we can save by river transportation and industrialization in the sun belt is the thing that we desire.

You know, as a historian, I can go back and read about Mr. Everett Leigh of Alabama Power who had a dream of electricity being in homes in Alabama; former Congressman John Burnett, former Congressman Albert Raines, and the men who believed in the river projects a long, great deal of time ago—and how to follow a man like Tom Bevill of knowing this dream is something that is foreseeable.

This is something that I had an opportunity last year when we testified before the legislation we passed in the State—I forgot how many people we had to co-sponsor this bill, but you know, it is unusual when a former legislator wants to grab a bill and put their name on it, because it is something we believe in.

We have taken a responsibility in the legislature of knowing what needs to be done, and we look to the Congress and your committee to show the leadership and the foresight for the development of our river projects.

We all know the information of river development in our State and also in our nation. The non-Federal Responsibilities Act was passed last year and was the first step.

I think the Alabama Legislature will assist in any way to make sure that we do our share and we look to the Congress for the great leadership under Congressman Bevill to help our plighted workers in our area.

Thank you.

Mr. **Bevill**. Very good.

Representative Richard Lindsey.

Mr. **Lindsey**. Thank you, Congressman, members.

This is my first year to testify before this subcommittee, and I must say it is an honor to appear before such a distinguished body of this Congress.

During the past two years that I have served in the Alabama legislature, we have become more aware of the needs to make this Coosa River navigable from Montgomery to Rome, Georgia, and due to the efforts of Senator Drinkard and Representative Junkins, myself, and other members, we have been able to introduce and pass legislation that would expand the powers of the Coosa Valley Development Authority and also pass legislation that commits $15 million to the Coosa Valley Development Authority to meet the non-Federal responsibilities of the project once the Federal Government announces that it will proceed with construction of the project.

As a result of these two bills, the legislature and the governor are now officially and legally lined up in support of the Coosa project.

The next step, of course, is securing the Federal funds to actually begin construction on this great project and we in the Alabama legislature understand very well when you talk about tight money and budget deficits.

We know what you mean and we understand that, but we must be very careful in a time of severe cutbacks not to lose sight of those projects that will strengthen our economy, that will improve our defense, and ultimately bring economic life to areas that have experienced difficult times in the recent years and months.

An investment in the waterways of this country will provide a secure future for America.

We realize there are those who will criticize us for even considering a water project such as this, but we say to you members of the committee that there are much greater benefits that will be derived from this project such as jobs and economic development along this Coosa River corridor than any cost that we would have to incur.

We want to say a special thank you to our Congressman Tom Bevill for his work on this project, and we realize that if it wasn't for his leadership and his work that we wouldn't be where we are today on this project.

We appreciate that and appreciate the other members of the committee and the work that you have done.

Thank you.

Mr. **Bevill**. Thank you.

All right. We have Mr. Ralph Clemens here, the Executive Vice President of the Coosa Alabama Waterway Association. We will be pleased to hear from you.

Mr. **Clemens**. Thank you, Mr. Chairman.

Mr. Chairman, members of the committee, the first thing I think would be appropriate would be to state our appreciation, our sincere appreciation for the courteous and considerate reception that has been shown by you and your colleagues and your staff. We really do appreciate it, and we thank you for it.

I am Ralph Clemens, Executive Vice President of the Coosa River Alabama Improvement Association, and as has been stated earlier, rationally, we are unable to ask for immediate construction funding for the Coosa up to Rome, Georgia.

However, the association consensus asks for whatever measures are necessary to maintain currency of the project, thus assuring a state of on-the-shelf readiness for a time when construction funds do come available.

It has been said time and time again, and I think studies have born these comments out, that opening the Coosa would probably have effects far more positive than our most optimistic projections.

We agree with that point of view. We also, on the other hand, appreciate the position of the government attempting to temporarily hold down now, large, public works projects, even though we have not seen the start of a new project for quite a number of years.

With that in mind we need to assure users and industry along the Alabama River of the maintenance of a consistently usable channel for transportation and to that end we ask for sufficient monies to be appropriated to rehabilitate in a timely manner that part of the river which was originally designated for dike construction and repair, as well as improved dredging profiles.

Of course, we are talking about the lower Alabama. Again, I sincerely appreciate your time and your courtesy.

Thank you, Mr. Chairman.

Mr. **Bevill**. Thank you very much.

Mary George, does that conclude the testimony?

Ms. **Waite**. We have just a word from Mr. McKenzie.

Mr. **Bevill**. The Chair recognizes Mr. McKenzie.

Mr. **McKenzie**. Mr. Chairman, committee members, I am here as a representative of the Gadsden-Etawau Chamber of Commerce, particularly the arm of the Coosa River Action Council.

We support the funding to keep the river flowing and navigable where it is and look to the future of getting it navigable all the way up through our area to Rome.

As you know, of course, the economy of our area has been pretty hard hit. The unemployment in Etawau County has been back and forth between 10 and 14 percent in the last few months. That is about twice the national level which, I think, is about seven percent, and although there are some things that are showing some signs of improvement up there, we have got a long way to go.

We know that river transportation can bring on growth. We have seen it in other countries and certainly in other states in this fine nation of ours.

All we are looking for is a chance for our people to work and have a better way of life, and we know this can help.

We appreciate your long-term interest in this and ask you to sustain that interest.

We appreciate the opportunity to testify before this committee today. Thank you.

Ms. **Waite**. Mr. Griffin, if he could just say a word from the Governor.

Mr. **Griffin**. Thank you, Mr. Chairman.

I am William Griffin, Executive Director of the Alabama Waterways Development Agency. I bring you the best wishes of the governor and his sincere interest in all of Alabama's rivers.

He recognizes just a little over a year ago that with the opening of that national north-south route, the Tenn-Tom giving us linking all of our rivers with some 16,000 miles of inland bargeable waterways, that it sort of—we can put our State in the limelight in that we are the number one State in the nation with 1,400 miles of bargeable waterways.

He recognized, too, that we needed that final link to this entire system and that is the group to do the marketing and the promotion of this system.

We are very pleased to tell you this morning that the governors efforts we think, are beginning to pay off.

We are relatively new, but we are very pleased to be working for all of the systems of Alabama and we are proud and pleased to be here with you this morning.

Thank you.

Representative Myers, we will be working your commerce and industrial groups on your Wabash system, by the way, real soon, calling on them, not to lure them to Alabama, but to use this new link to the Gulf of Mexico when their products move down.

Mr. **Myers**. We are anxious to hook up with you, but we have a few problems back home.

I congratulate you for your spirit here that you have of cooperation between the State and the Federal Government.

I wish we had it back in Indiana. We would have had that waterway built a long time ago.

I can't even get our two Senators to understand and see the light. I was going to bring it up with Senator Denton, but I will talk to him privately about it.

Do you have any opposition to the legislature at all to these projects?

Mr. **Junkins**. We have a few people. I think the legislature as a whole totally supports it because of the link of industrialization, and even I was telling Congressman Callahan of the cooperation that we have had from the Mobile delegation all the way up.

The Coosa River, when it is mentioned, everybody wants to grab that bill and put their name on it.

Mr. **Myers**. You certainly know how to go about it, and having Tom here in the position you have him hasn't hurt anything.

He also looks forward to this day. He translates for us. You people talk funny, but he always writes it down, so we know what you are saying.

You may talk funny, but you sure get things done.

Mr. **Bevill**. I have been telling him it is always nice to have somebody come in here and testify that doesn't have an accent.

We appreciate all of you, and this subcommittee, of course, is very supportive of your projects and our Alabama projects as well as the other water projects throughout the nation, and they have proven it time and again.

The legislature with the leadership we have here from the legislature today has been very supportive, and Governor Wallace has never turned us down on any request.

I remember when I talked to him even some of his cabinet members objected to making this commitment that you have mentioned that you all got the bill through on, but he didn't hesitate.

He has always been very supportive of the development of our waterways. He knows that it is an investment. We are not spending money. We are investing money, and we have a hard time sometimes with some people up here making that clear.

There is a big difference, you know. But it is commendable. This group that is in this room right here today deserves a lot of credit for the development of our waterways and our ports and our inland waterways system, our locks and dams.

So, it is going to be paying off. As Bobby Junkins mentioned here and Richard mentioned, it is going to be paying off.

We are talking about long-term investments, and we know historically they always pay off.

Thank you for coming, and it is always nice to see you.

BEN ERDREICH
6TH DISTRICT, ALABAMA

COMMITTEE ON BANKING, FINANCE
AND URBAN AFFAIRS

COMMITTEE ON GOVERNMENT
OPERATIONS

SELECT COMMITTEE ON AGING

439 CANNON BUILDING
WASHINGTON, DC 20515
(202) 225-4921

DISTRICT OFFICE
105 FEDERAL COURTHOUSE
BIRMINGHAM, AL 35203
(205) 254-0888

Congress of the United States
House of Representatives
Washington, DC 20515

Statement of Rep. Ben Erdreich
Subcommittee on Energy and Water Resources
House Committee on Appropriations
April 14, 1986
Re: Budget Request of Coosa-Alabama River Improvement Association

Mr. Chairman, I appreciate the opportunity to make this statement of support for the budget request of the Coosa-Alabama River Improvement Association, to allow the necessary maintenance of the Alabama River channel to stay on course. The rehabilitation work still to be done on the lower Alabama River requires, I feel, an appropriation in excess of the Administration's recommendation.

This users' association made valid points in testimony today: inland water navigation is only a viable alternative to other modes of transportation if the channels and locks are dependable year-round. In the dry summer months the water level in the Alabama drops somewhat, and this could cause greater problems than it already has if the additional work is not completed.

I join this association and many others across Alabama in the hope that the work to deepen the Mobile Port will soon begin. Traffic on the Alabama and Tombigbee Rivers will benefit greatly from this effort. I was surprised to learn recently that 35% of cargo-carrying, ocean-going vessels cannot use the Port of Mobile until the channel is deepened. Because the State of Alabama has been blessed with so many good, navigable waterways, it is doubly important that we begin that vital work. This and the other port projects around the company should help the U.S. regain some of the shipping business lost to other countries because of this deficiency.

Again, Mr. Chairman, my thanks to you and your Subcommittee for all of your help on these important projects.

STATEMENT BY HON. GEORGE (BUDDY) DARDEN
BEFORE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE
OF THE HOUSE APPROPRIATIONS COMMITTEE
APRIL 14, 1986

Mr. Chairman, Members of the Subcommittee, and distinguished guests;

I want to urge the allocation of sufficient funds to maintain the improvements already made to the Alabama-Coosa River Basin, and to continue preparations for future improvements along this waterway in both Alabama and Georgia.

Ongoing improvements to the Upper Coosa River Basin -- part of which lies within the Seventh District of Georgia -- are vital to the economic growth of this region. The positive impact of work already accomplished along the lower portions of the Alabama River gives testament to the viability and benefits of this project. An improved water transportation system in this portion of Georgia and Alabama will complement its already outstanding network of roads and railways.

Of course, the Coosa-Alabama Project offers the additional benefits of flood protection and cost-effective hydroelectric power to millions of residents along its path.

I urge you to forego imposition of additional taxes or ton-mile fees proposed by the Administration. Such charges would only stifle investment and threaten expansion in the business community.

The members of the Coosa-Alabama River Improvement Association, Inc. -- including Georgians such as B.H. Mooney Jr., Sid Willingham and Harold Hunter Jr. -- are to be commended for their foresight, and their devotion to improving the area's economy and way of life. Their efforts have resulted in development of a superb inland waterway which, with eventual expansion, will be a leading tool for the region's economic development well into the 21st Century.

I urge you to carefully consider the association's funding recommendations, keeping in mind the immense benefits of the Coosa-Alabama Project to surrounding communities in Georgia and Alabama.

George (Buddy) Darden

STATEMENT OF THE
HONORABLE RONNIE G. FLIPPO
BEFORE THE ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE
APRIL 14, 1986

The Coosa-Alabama Waterway

Mr. Chairman, distinguished colleagues. I want to thank you for the opportunity to come before you today in support of the FY87 appropriations request for the Coosa-Alabama Waterway.

My home state of Alabama is an area rich in natural resources and blessed with the most extensive system of navigable waterways of any state in the U.S. This combination of factors along with the location of a modern major port at Mobile, makes the use of waterways for transporting coal and agricultural products a naturally efficient and highly desirable part of the region's economy.

The development of these natural resources and their transport by waterways both for domestic consumption and for export to foreign markets, is a valuable part of our nation's economy and contributes to a more favorable U.S. trade balance.

The Coosa-Alabama is an important part of an integrated system of waterways in Alabama and throughout the nation which provide efficient and reliable transportation for a wide range of users. The completion of the project to deepen the Port of Mobile will be a significant benefit to shippers using the Coosa-Alabama for agricultural and natural resource products.

I want to acknowledge the efforts which has been put forth by the members of the Coosa-Alabama River Improvement Association each year in support of this project. I know the members of this committee are well aware of their good work and I am pleased to have this opportunity to support their efforts.

NEWS PUBLISHING COMPANY
P.O. DRAWER F — ROME, GEORGIA 30161 — (404) 291-6397

April 8, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Sir:

Our newspaper has recognized for many years the vast potential that lies within the scope of the Coosa-Alabama River System. Completion of the system will directly enhance the economic well-being of countless thousands of citizens.

Your Sub-Committee has looked with favor upon this program in the past and all of us closely involved are grateful. We know that you are also aware that completion of the program as rapidly as possible is in the best interest of both the government and the people.

We specifically ask that you resume design and engineering work on the Coosa Project, which was suspended in 1983. Also maintenance and operation monies for Alabama River, Allatoona, Carter's Lake, Claiborne, Jones Bluff and Millers Ferry dams and locks, and improving the Mobile Harbor.

We earnestly solicit your continued support and urge that favorable consideration to be given to the total Fiscal Year 1986 request.

Sincerely,

B H Mooney Jr.
B.H. Mooney, Jr.
Chairman of the Board

BHM, Jr./lf

April 8, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

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We earnestly solicit your continued support and urge that favorable consideration to be given to the total Fiscal Year 1986 request.

Sincerely,

Burgett Mooney III

Burgett Mooney, III

BM,III/lf

MobileAudio
National City Bank Bldg., 3rd Floor, P. O. Box [illegible]

ROME PRINTING COMPANY
PRINT COMMUNICATIONS

April 8, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

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We earnestly solicit your continued support and urge that favorable consideration to be given to the total Fiscal Year 1986 request.

Sincerely,

William A. Banks

William A. Banks

WAB/lf

Union Camp

KRAFT PAPER
& BOARD DIVISION

P.O. BOX 328, MONTGOMERY, AL 36195-5801 TELEPHONE (205) 361-2100

April 16, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, DC 20515

Dear Representative Bevill:

As a member of the Coosa-Alabama River Improvement Association, Inc. Union Camp Corporation has kept abreast of the efforts to fund development of the Coosa-Alabama River system.

We have a special interest in the maintenance and future development of the Alabama River from Montgomery to Mobile, especially rehabilitation of the training dikes and modification of the dredging profile of the river channel below Claiborne.

At some time in the future, our ability to barge linerboard from Montgomery to Mobile for export or movement into other river systems would be of great benefit.

Also, the upstream development of the Coosa system may provide Union Camp with some future benefit in terms of possibly barging wood to the mill in Prattville.

Therefore, because of the potential benefit to our operations in Alabama, especially on the Alabama River, we are supportive of the Association's request for FY86 funding.

Sincerely,

S. T. Nutting
Resident Manager

/cp

cc: H. C. Brothers

MONDAY, APRIL 14, 1986.

MOBILE AREA PROJECTS

WITNESSES

ROBERT M. HOPE, DIRECTOR, ALABAMA STATE DOCKS DEPARTMENT

JOHN L. McCARRON, JR., CHAIRMAN, PORT AND WATERWAYS TASK FORCE

BUDDY BROWNING, ALABAMA STATE DOCKS DEPARTMENT

MARION RAMBEAU, MOBILE CHAMBER OF COMMERCE

WILLIAM GRIFFIN, DIRECTOR, ALABAMA WATERWAYS DEVELOPMENT AGENCY

Mr. BEVILL. Next we have the Port of Mobile group, John McCarron and Buddy Browning and Marion Rambeau.

If you like, we will make all of your prepared statements a part of the record and then you may just summarize them and we appreciate your being here and looking forward to hearing from you.

Who is the spokesman? We would like to hear from you.

Mr. RAMBEAU. I would like to say we appreciate the opportunity to appear before this committee again and I have a statement on behalf of Mr. Robert M. Hope I would like to submit for the record.

Mr. BEVILL. Without objection.

[The statement of Mr. Hope follows:]

STATEMENT OF

ROBERT M. HOPE, DIRECTOR

ALABAMA STATE DOCKS DEPARTMENT

MOBILE, ALABAMA

BEFORE

THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT

WASHINGTON, D. C., APRIL 14, 1986

Good day Gentlemen:

On behalf of the Alabama State Docks Department and the Port of Mobile we appreciate the opportunity to appear before this Committee today and offer this statement in regard to Fiscal 1987 appropriation measures relative the Mobile Harbor.

The Alabama State Docks Department is the terminal facilities operator for the Port of Mobile and operates and maintains port handling facilities which include a Bulk Material Handling Plant, Public Grain Elevator, Export Coal Handling Terminal, general cargo facilities including wharves, piers and warehouses as well as a Terminal Railway. The Port complex entails approximately 1445 acres and is valued in excess of $500 million.

The primary cargoes handled through the Port of Mobile include inbound ores such as bauxite, manganese, magnesite, ilmenite, iron ore and steam coal. Grain exports include soybeans, corn, wheat, oats, middlings, and screenings. Coal for export constitutes a major cargo as well as outbound crude oil which moves to the Port from recovery operations in Florida and North Mobile County.

During the past ten years the Alabama State Docks Department and the State of Alabama have expended in excess of

$250 million on renovations, expansions and improvements to the Port handling capabilities at the Mobile facilities.

These funds have been expended to meet the required present cargo handling capability of tonnage generated by our in-place inland river system, the five trunk line railroads serving Mobile, and forty-five truck lines which initiate and terminate cargo in Mobile.

A complete Port renovation program impacting each of the four terminal operating facilities at Mobile has been completed and the Port's handling capability in all areas has been increased and that increased capability provided an emphasis for escalating tonnage at Alabama State Docks' facilities last year. Export coal handled through the McDuffie facilities increased by 1.5 million tons and export grain moving through the Public Grain Elevator increased by almost a million tons.

Programs which we have previously discussed with this Committee with respect to the acquisition of additional spoil disposal sites and subsequent diking improvements thereon have been completed while others are under contract at this time.

As Director of the Alabama State Docks Department I am supporting the Corps of Engineers Budgeted Allocation for Fiscal Year 1987 in the amount of $7.1 million for Operation and Maintenance functions in the Mobile Harbor for Fiscal '87 and respectfully request that this Committee approve that Budgeted Allocation.

The Alabama State Docks Department and the Governor of the State of Alabama jointly support the deepening of Mobile Harbor to a depth of fifty-five feet to accommodate the very large bulk carriers under the MOBILE HARBOR DEEPENING AND IMPROVEMENT PROGRAM.

The Alabama State Docks Department, the State of Alabama, and the U. S. Army Corps of Engineers have jointly planned an environmentally sound and economically feasible phased approach to the new construction project.

The Project authorized in Public Law 99-88 permits a phased development of the Project Deepening and the Alabama State Docks, State of Alabama and the Corps of Engineers are proposing to commence the initial phase of work which will include the construction of a new turning basin and additional anchorages on the Mobile River at the confluence of Mobile River and Mobile Bay just east of the McDuffie Island Export Coal Terminal.

This initial phase of work will be extremely timely to the project and will offer immediate benefits for the turning and handling of bulk cargo vessels at the south end of the Harbor facilities.

We would respectfully request this Committee to approve the Budgeted Allocation for new work of $15 million set out in the Fiscal 1987 Budget for Mobile Harbor.

We again appreciate the opportunity to appear before this Committee and voice our support in concert with that of Governor George C. Wallace for the requested Budgeted Allocations as well as this Committee's continued cooperation with the U. S. Army Corps of Engineers with respect to the Mobile Harbor Projects.

We respectfully request that this statement be incorporated in and made a part of the permanent record of these Hearings.

Mr. **Rambeau**. Very briefly, we would like to tell this committee, Mr. Chairman, that many of the projects we have talked to you about in the last couple of years as far as dredging and docking for those sites have been finished up at Mobile. We are either under contract or completing there and in response to your comments earlier this morning in the directors meeting, I will tell you again this year that your State port, County Mobile, exported more volume than we imported last year and we are doing our part to help the United States in trade.

That was done basically on heavy volume export coal out of your area. We are up to ten million tons last year and we exported a hundred million bushels of grain so we are very, very proud of that.

We are basically—we are supporting $7.1 million for O&M for fiscal year 1987 and $15 million for new construction work and we are positioning ourselves to take advantage of a phase program for the new construction work where we can get the most expedient return of those monies and benefit our shipping public as quickly as possible with that new construction.

Thank you.

Mr. **McCarron**. Mr. Chairman, I am John McCarron. I represent the Task Force in the Mobile Area Chamber of Commerce. I appreciate the opportunity to appear before you in support of the various projects that have been budgeted.

Briefly, I will turn in my statement to be made part of the record, but I would like on certain projects of the Mobile harbor, the Bayou La Batre Channel, the Coden Channel, the Dauphin Island Channel, Fowl River and especially the Three Mile Creek, the new drainage that the budgeted amount to be increased to the Corps capability.

All of these projects are definitely needed and we fully support them.

We also want to support the $15 million that has been allocated on the new construction and feel that it is sorely needed and we need to get on with that. Again, I appreciate appearing before you all in support of these various projects and I will turn in my statement to the people here.

[The statement of Mr. McCarron follows:]

STATEMENT OF
JOHN L. MCCARRON, JR., CHAIRMAN
PORT AND WATERWAYS TASK FORCE
MOBILE AREA CHAMBER OF COMMERCE
MOBILE, ALABAMA
BEFORE
THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS
FOR ENERGY AND WATER DEVELOPMENT

WASHINGTON, D. C., APRIL 14, 1986

GOOD MORNING LADIES AND GENTLEMEN:

ON BEHALF OF THE MOBILE AREA CHAMBER OF COMMERCE WE APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE THIS SUBCOMMITTEE TODAY AND OFFER THIS STATEMENT IN REGARD TO FY 1987 APPROPRIATION MEASURES FOR MOBILE AREA PROJECTS.

MR. CHAIRMAN WE ARE PLEASED TO NOTE THAT THE FY-1987 BUDGET INCLUDES FUNDS IN THE AMOUNT OF $15 MILLION FOR INITIAL PHASE CONSTRUCITON WORK IN CONNECTION WITH THE DEEPENING OF THE MOBILE HARBOR TO A DEPTH OF 55'. WE WOULD RESPECTIVELY REQUEST THIS COMMITTEE TO APPROVE THIS BUDGET ALLOCATION FOR NEW WORK OF $15 MILLION WHICH HAS BEEN SET UP IN THE FY-1987 BUDGET FOR MOBILE HARBOR. THERE ARE OTHER LOCAL WATERWAY PROJECTS THAT ARE VITAL TO THE MOBILE AREA, INCLUDING OPERATION AND MAINTENANCE DREDGING OF THE MOBILE HARBOR, AS WELL AS PROJECTS VITAL TO THE COMMERCIAL FISHING AND RECREATIONAL INTERESTS WHICH ARE UNDER BUDGETED. THE CORPS APPROVED CAPABILITIES WE RESPECTFULLY SUBMIT SHOULD BE NOTED AND WE ARE LISTING THESE BELOW AS FOLLOWS:

PROJECT	AMOUNT BUDGETED	TOTAL CORPS CAPABILITY
MOBILE HARBOR	$7.1 MILLION	$ 9.3 MILLION (DREDGING)
BAYOU LA BATRE CHANNEL	$60,000	$ 60,000 (FEASIBILITY STUDY)
CODEN CHANNEL	————	$141,000 (DREDGING)
DAUPHIN ISLAND CHANNEL	$560,000	$560,000 (DREDGING)
FOWL RIVER	$134,000	$293,000 (DREDGING)
THREE MILE CREEK	$2.3 MILLION	$ 2.3 MILLION (CONSTRUCTION)

MR. CHAIRMAN, WE FURTHER REQUEST THAT THE FY 1987 BUDGET BE INCREASED TO THE CORPS CAPABILITIES ON THESE PARTICULAR CHANNEL PROJECTS, SO THAT THEY MAY BE PROPERLY MAINTAINED PRIMARILY FOR THE IMPORTANT COMMERCIAL FISHING INDUSTRY AS WELL AS THE SPORTS FISHING INDUSTRY OF OUR LOCAL AREA.

ON BEHALF OF THE MOBILE AREA CHAMBER OF COMMERCE AND THE PORT OF MOBILE WE ARE REQUESTING THAT THIS SUBCOMMITTEE CAREFULLY REVIEW THE BUDGETED ALLOCATIONS, EXAMINE THIS TESTIMONY, CONFER WITH THE MOBILE DISTRICT OF THE CORPS OF ENGINEERS FOR SUBSTANTIATION AND APPROPRIATE ADEQUATE FUNDS TO ALLOW THE CORPS TO INSTITUTE AND COMPLETE A PROPER MAINTENANCE DREDGING PROGRAM ON PROJECTS THROUGHOUT THIS AREA DURING FY 1987.

AGAIN, I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE THIS SUBCOMMITTEE TODAY AND I THANK YOU FOR YOUR INTEREST AND CONSIDERATION. WE WOULD RESPECTFULLY REQUEST THAT THIS STATEMENT BE INCORPORATED IN AND MADE PART OF THESE HEARINGS.

Mr. BEVILL. Very good. Thank you.

Mr. BROWNING. That was the Chamber's report there. I will ask Mr. Griffin if he wants to say anything.

Mr. GRIFFIN. Mr. Chairman, I can only repeat that recognizing our river systems in the State of Alabama, obviously our port facilities must be supplied to handle the traffic we hope to generate for this, and the Governor, I can assure you, supports the request by the Mobile Area for the dock facilities and port facilities.

Mr. BEVILL. Thank you very much. Thank each of you for your fine presentation.

HEARING SPEECH

SENATOR HOWELL HEFLIN

FUNDS FOR THE ALABAMA WATERWAY PROJECTS FOR FISCAL YEAR 1987

APRIL 14, 1986

MR. CHAIRMAN, AS YOU AND THE OTHER MEMBERS OF THIS COMMITTEE KNOW, I HAVE A DEEP AND ABIDING INTEREST IN THE DEVELOPMENT OF THE WATERWAY RESOURCES IN ALABAMA AND OUR NATION. I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY AND JOIN WITH SPOKESMEN FROM THE ALABAMA RIVER DEVELOPMENT ASSOCIATIONS IN SUPPORT OF FUNDS FOR THE CONTINUED AND ORDERLY DEVELOPMENT OF WATER RESOURCES IN ALABAMA.

BECAUSE OF YOUR CROWDED AGENDA, MY REMARKS WILL BE BRIEF. IT WILL BE MUCH MORE BENEFICIAL TO THIS COMMITTEE TO RECEIVE THE VIEWS AND RECOMMENDATIONS OF THOSE HERE TODAY FROM THE ALABAMA WATERWAY DEVELOPMENT AUTHORITIES WHO HAVE TRAVELED SO FAR TO PRESENT THEIR CASES TO YOU ON BEHALF OF THEIR RESPECTIVE WATERWAY SYSTEMS. THIS GROUP IS HERE TODAY ARE DEDICATED TO THE PRINCIPLE THAT CITIZENS OF ALABAMA WILL REALIZE AND BENEFIT FROM THE VAST POTENTIAL OF ALABAMA'S RIVERS AND OTHER WATER RESOURCES. I WARMLY COMMEND THEIR TESTIMONIES TO YOU.

MR. CHAIRMAN, WATER IS OUR STATE'S RICHEST AND MOST ABUNDANT NATURAL ASSET. IN FACT, ALABAMA IS BLESSED WITH

MORE MILES OF NAVIGABLE WATERWAYS THAN ANY OTHER STATE IN THE NATION.

AS THIS COMMITTEE IS WELL AWARE, INLAND WATERWAYS ARE A VITAL COMPONENT OF AMERICA'S TRANSPORTATION INFRASTRUCTURE. THE AVAILABILITY OF THE EFFICIENT AND RELIABLE BARGE SERVICE IS EXTREMELY IMPORTANT TO THE VIABILITY OF KEY SECTORS OF THE U. S. ECONOMY AND CERTAINLY THE ECONOMY OF ALABAMA. THE ECONOMIC LIVELIHOOD OF CERTAIN GEOGRAPHICAL AREAS MAY WELL DEPEND ON TRANSPORTATION EFFICIENCIES WHICH ONLY WATERWAYS CAN OFFER IN DELIVERY OF RAW AND VITAL MATERIALS, ACCESS TO DISTANT MARKETS, ECONOMIES OF SCALE AND/OR WATER COMPELLED FREIGHT RATES. FOR ALL OF THESE REASONS AND MORE, THERE IS CLEARLY A BROAD PUBLIC INTEREST IN THE INLAND WATERWAY SYSTEMS WHICH JUSTIFIES THE REQUEST FOR CONTINUED FEDERAL PARTICIPATION.

ALL OF THE PROJECTS FOR WHICH WE ARE SEEKING FUNDS WILL SERVE SEVERAL PURPOSES AT ONCE; NAMELY, BETTER ECONOMIC OPPORTUNITIES, MORE AND BETTER RECREATIONAL OPPORTUNITIES, MORE JOBS AND A BETTER STANDARD OF LIVING. INDEED, THE OVERALL QUALITY OF LIFE IN OUR STATE AND ELSEWHERE WILL BE ENHANCED IF WE FUND THESE PROJECTS AND BRING THEM TO COMPLETE FRUITION.

I AM MOST GRATEFUL TO THIS COMMITTEE FOR ITS INTEREST IN THE FULL DEVELOPMENT OF THE WATER RESOURCES IN ALABAMA.

IN ALABAMA, THERE HAVE BEEN BILLIONS OF DOLLARS IN NON-FEDERAL WATER RELATED DEVELOPMENTS OVER THE PAST FIVE YEARS. THIS IS EVIDENCE THAT THE FEDERAL FUNDS ALLOCATED BY THIS COMMITTEE ARE SURELY TRUE INVESTMENTS. WITH YOUR CONTINUED HELP, THE DEVELOPMENTS WILL RETURN RICH DIVIDENDS TO OUR CITIZENS AND WILL CONFIRM THE FAITH AND HIGH EXPECTATIONS OF THIS COMMITTEE.

THANK YOU, MR. CHAIRMAN.

STATEMENT OF REPRESENTATIVE SONNY CALLAHAN
FIRST CONGRESSIONAL DISTRICT OF ALABAMA
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS

APRIL 14, 1987

MOBILE BAY AREA PROJECTS

Mr. Chairman, I am pleased to be able to submit my request for fiscal year 1987 funding for projects in the Mobile Bay area.

I am deeply grateful for this subcommittee's action in last year's supplemental appropriations bill which authorized deepening of the Mobile Harbor channel. It is also very encouraging that the Administration has requested $15 million in initial construction funds for the project. I urge the subcommittee to approve that request so that we can begin this critical work. In the meantime, it is imperative that we continue to provide adequate operation and maintenance in Mobile Harbor. I request $9,167,000 for that purpose.

Authorization of the flood control project for Three Mile Creek in Mobile is in the water resources bill now in conference committee. The Administration has assumed enactment of that bill and has requested $2.3 million to begin construction on the Three Mile Creek project. I urge the subcommittee's approval of this request.

The Corps of Engineers has been studying the feasibility of deepening the Bayou La Batre Channel for several years. The coastal area of Alabama has experienced a great deal of oil and gas exploration activity and this increased activity has further pointed to the need for this channel improvement. A $60,000 funding level is required to continue the Bayou La Batre Channel Deepening Study in Fiscal Year 1987. The Administration has recommended that level, and I request your favorable action on that request.

Most of our needs in the Mobile area have to do with vital ongoing maintenance activities. Our major industries, as well as commerce from other areas of the nation, are dependent on an efficient waterway system for the transportation of various commodities. Commercial and recreational fishermen depend on having access to fishing areas in authorized channels in Mobile Bay and the Gulf, and they depend on having reliable access to safe harbors. These are just a few of the reasons why maintenance activities are so important. I urge the committee's consideration of the Corps' full operation and maintenance capabilities on these projects: Gulf Intracoastal Waterway, $7,891,000; Dog and Fowl Rivers, $293,000; Perdido Pass, $1,323,000; Dauphin Island Bay, $560,000; Bayou Coden, $141,000; and Bon Secour, $680,000.

Thank you again, Mr. Chairman, for allowing me to testify in support of these important projects.

MONDAY, APRIL 14, 1986.

WARRIOR-TOMBIGBEE WATERWAY AND PORT OF MOBILE

WITNESSES

OFFA NICHOLS, JR., PRESIDENT, WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

WILLIAM GRIFFIN, DIRECTOR, ALABAMA WATERWAYS DEVELOPMENT AGENCY

SHELDON MORGAN, CHAIRMAN OF THE BOARD, WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

Mr. BEVILL. Next we have Colonel Offa Nichols.

The Chair recognizes Colonel Nichols.

Mr. NICHOLS. Thank you, sir. I want to defer initially to Sheldon Morgan who is our chairman.

Mr. MORGAN. My name is Sheldon Morgan. I am Chairman of the Warrior-Tombigbee Development Association. We are pleased to appear before this committee once again with our request for certain phases of our program and to support the request of the Port of Mobile and the harbor improvement request and the other association requests before you today from Alabama.

Making our statement today is Mr. Offa Nichols who is the president of our association.

Mr. NICHOLS. We have a statement of the maximum size the rules will permit, including a list of witnesses and accompanying supporting statements which we would like to submit for the record.

Mr. BEVILL. Without objection, they will be made part of the record.

Mr. NICHOLS. I have chosen today to illustrate how much we appreciate the committee's support by summarizing some of the results that have come from your support. We believe that the Warrior-Tombigbee Waterway demonstrates a very positive result of the water resource development program as it is envisioned and possible through the Civil Works Program.

Begun over 100 years ago and navigable to some extent through 17 turn-of-the-century locks since about 1915, the Warrior-Tombigbee began a new phase just after World War II. When the Warrior-Tombigbee Development Association, which we represent here today, began its partnership with the Congress and the Corps in 1951, annual tonnage was some 2.5 million.

Studies authorized by Congress projected great potential and positive benefits. New lock and dam construction began with Demopolis, followed by Warrior—now Armistead Selden—then Coffeeville, Holt and in 1975, Bankhead.

These five new locks are of standard size and design—110 by 600 feet. During the studies leading to this rebuilding, traffic was projected to reach 8 million tons by 1980.

What happened? True to promise, traffic grew and there has been local investment and development. The projected 8 million tons did move—not in 1980, but in 1966. Perhaps symbolically in 1980, 16.7 million tons moved—more than twice the projection and the benefits. Notwithstanding the following worldwide recession and continuing tough times for the chief waterway users—steel, coal, petroleum and farm products—there has been more growth to the 18 million ton level in 1984 and 1985.

During that time, non-federal interests have responded. In the short five years of my personal knowledge, several billions of additional investments have been added by local interests.

For example, a billion by the coal industry, both deep and surface; a billion from the steel industry in new and modernized facilities at Birmingham, and more recently the new million at Tuscaloosa; and, of course, many millions by the marine industry in equipment and facilities.

It is interesting to note that the $250 million expansion and modernization program recently completed by the Alabama State Docks alone far exceeds the total Federal investment to build all the locks and dams on the entire waterway.

That is the good news—there is some not so good. This rapid growth and highly competitive world market conditions have placed new demands on the waterway. Right in the middle of the system there is an older lock—Oliver, built in the thirties, and not of today's size and construction.

Bottlenecks began to develop and new studies began. As you well know, the studies were on and off, delayed by changing policies on measuring benefits and costs, and the bottlenecks grew worse. And, of course, no authorization bills.

As an aside, I know at this point I am singing to the choir. But thanks to the Appropriations Committees, the Oliver Study was finished, continued planning and engineering funds were provided and everything is in readiness to break ground. Concurrently, channel efficiency and reliability have been tested and challenged. Programs are underway to meet these challenges, and to protect this great natural resource.

The Corps' budget request for fiscal year 1987 contains $10.5 million to begin the new construction. This amount will support an efficient and cost-effective beginning, preparing the way for the lock construction contract to be awarded in 1987. We could navigate through the new lock in 1991.

I understand the Corps has made an adjustment in their stated capability, but we will be glad to work with George to determine what the right figures are after the Corps change. We need the money that the Corps has been allowed to ask for in the budget request which when I last saw it was 11.2 million.

We need the additional capability that the Corps has been allowed to state because there are some projects that have been funded incrementally over the last several years that will have to be set aside if some additional capability funding is not furnished.

We thank you for your confidence as has been reflected by your support. We believe that the project has faithfully responded and has confirmed your wisdom in providing your support.

We hope you are able to continue and we pledge our best efforts to make you proud you did.

Mr. **Bevill.** Very good. We always appreciate your testimony and your appearance here and we know that, Sheldon, you are one of the busiest men in the State of Alabama and you always drop everything and take off up here when the Warrior-Tombigbee is calling for you. We appreciate you.

Mr. MORGAN. Thank you, Mr. Chairman. It is important enough that I have a sincere interest in the development. It is very important to Mobile, my home town. We have an association, of course, that is supported by our members.

That is how we get our work done. It is a very broad association of business interests and government. We have a couple that are with us today I would like to introduce for the record.

We have Les Hedgins of the Corporate Association with us today and John Mixon of the Warrior Gulf Association, and Phillip Wiedmeyer, a manager at Alabama Power and Light.

Mr. BEVILL. Mrs. Morgan, is she here?

Mr. MORGAN. No.

Mr. BEVILL. We are delighted to have each of you. Thank you for your fine presentation and, of course, I will be here. It wouldn't be a meeting if we didn't have Offa here with us. We appreciate you so much.

Mr. NICHOLS. I want to take note of the fact over the last few days we have had 15 people here representing us. Some have left to go do other things, but we have a number of others that are not here now who are listed in the testimony.

We still have Buddy Griffin here with us representing our group.

Mr. BEVILL. He has already spoken on behalf of all of them.

Mr. MYERS. Let me ask you a question. About the Warrior-Tombigbee—it is doing all right, but the Tenn-Tom is not living up to expectation. I hear about this all the time back home. What is the problem? What is the problem on the Tennessee Tombigbee?

Mr. NICHOLS. The Wall Street Journal had an editorial comment about a month ago on just exactly what you are talking about. They made the most sensible comment that the Wall Street Journal has made on the Tenn-Tom.

They said there are some things going on in the world that are bigger than the Tenn-Tom that are having an adverse effect on all kinds of heavy industry and particularly those of you who use waterways. It is the first time I have seen the Wall Street Journal even intimate there was something causing this problem other than a bad decision to have put it there.

The traffic has been growing month-by-month on the Tenn-Tom. They are encouraged by that. The things that are moving are mostly things that weren't uncovered in the studies.

Of course, the studies were basically coal oriented as far as the large tonnage was concerned and, you know, what has happened in the world as far as coal is concerned. So a lot of things are moving that nobody discovered.

That is how the Warrior-Tombigbee got from the 8 million they were projecting up to 16 million. The same thing will happen on the Tenn-Tom in a few years.

Mr. MYERS. I am sure you are right, but in the meantime it is difficult for us to fund new projects when they say, gee, look at the last one you built. In the first place, it weighs heavy on the judgment of this committee. They say you used bad judgment; you didn't need the Tombigbee. I think they are wrong, but it makes it difficult for us to convince our colleagues on the floor over here.

Mr. NICHOLS. I have heard it jokingly said we finished thanks to the support of the committee, Mr. Bevill and others, that Tenn-Tom was finished a year-and-a-half or two years ahead of schedule and there are some who say the opponents of the Tenn-Tom had more to hurrying up to get it through so they would have two years to yell about.

Mr. BEVILL. There is a lot of truth in that. I get a monthly report on everything that goes through the Tenn-Tom and every month without exception the tonnage has increased. I know that in most instances when the criticism is coming from those news medias that never did support the Tenn-Tom. They fought it all the way through, but it is completed now.

It is not even scheduled to be opened yet. Next September was the opening date for many, many years.

So I am pleased with it. I think we are going to see a tremendous economic impact there. Of course, we know that internationally, worldwide right now the shipping is off, international trade is off. Australia is cutting into the coal market, for example.

But the Tenn-Tom is going to help fight that and going to help fight this deficit, trade deficit which is going to put people back to work; instead of exporting jobs we will be back putting our own people back to work.

Mr. WATKINS. May I make a remark on that?

Mr. BEVILL. Yes.

Mr. WATKINS. I read those articles and I can recall five years ago, Mr. Chairman, we were still fighting groups that were wanting to kill the Tennessee-Tombigbee. If they had been successful—I know with business people many of them were still looking with questions whether we were going to ever make the Tennessee-Tombigbee a reality.

It takes a lot of lead time. I don't think, in my opinion, probably many of them had prepared that much lead time to start building their markets and selling and all that. So I think those people who are critical about the first year or two of the Tennessee-Tombigbee should give it some time to grow and be able to get it off.

I think it will be an enormous impact for that entire region in the country.

Mr. MORGAN. I was just going to say, Mr. Chairman, just at the time it was completed the media particularly started entering into judgment on its success even at the time of opening and shortly hereafter. They started measuring it month-by-month on a 50 year project, 50 year life.

That is pretty shortsighted, I think, to start judging a project that has got lasting duration over our lifetime and beyond to determine, well, it was not successful, hasn't been successful here in the first year.

Mr. BEVILL. I don't know of a waterway in the world that has any business the first two or three years. I don't expect it to have any traffic that will amount to anything for five or ten years.

Mr. MYERS. Any business you start takes two or three years to get started. It is difficult to start a business.

Mr. NICHOLS. When Mr. Bevill rode the first barge through he made a statement that was on national T.V. that we have not spent $2 billion, we have invested $2 billion. What my brief statement here today was designed to reflect the investment that has come forth from non-federal agencies as a result of the Federal seed money, so to speak, if I might say that.

Mr. **Myers**. We are convinced of that. It would make it easier if we had some response to answer the critics. I was not critical of you.

Mr. **Nichols**. I understand that.

Mr. **Morgan**. You do need that. We will go back home and try to develop that.

Mr. **Bevill**. Thank you very much.

[The support documents follows:]

STATEMENT OF REPRESENTATIVE SONNY CALLAHAN
FIRST CONGRESSIONAL DISTRICT OF ALABAMA
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS

APRIL 14, 1986

BLACK WARRIOR, WARRIOR, TOMBIGBEE WATERWAY

Mr. Chairman, I am pleased to be here to voice my support for the fiscal year 1987 funding request for the projects included in the Black Warrior, Warrior, and Tombigbee River System.

The Black Warrior, Warrior, and Tombigbee Waterway is an extremely successful water transportation system. Some 80 percent of the Port of Mobile's coal traffic travels on the waterway. Over 5 million tons of coal move on the system to electric generating plants. Grain from 21 counties in Alabama and Mississippi is shipped to Mobile on the waterway. It also provides substantial movement for commodities such as ore, steel, forest products, petroleum, and chemicals.

The President has requested $11.948 million for operation and maintenance on the Black Warrior, Warrior, and Tombigbee System for fiscal year 1987. The Corps of Engineers' capability is $12.178 million. I believe that adequate operation and maintenance is crucial, and I hope you will approve an appropriate amount in this area.

The locks and dams on this system have been modernized, except for the William Bacon Oliver Lock and Dam. This facility is obsolete and is a bottleneck. Thanks to the leadership of this subcommittee, construction of a new lock and dam was authorized in last year's supplemental appropriations bill. Indeed, the Administration's 1987 budget request includes $10.5 million in initial construction funding for the Oliver Lock and Dam. That funding request assumes enactment of the waterways trust fund in authorization legislation now in conference committee. That trust fund would provide an additional $10.5 million for this project. I hope this subcommittee will approve an appropriate level of construction funding for the Oliver Lock and Dam pending ultimate authorization of the trust fund.

Thank you, Mr. Chairman, for permitting me to testify in support of the Black Warrior, Warrior, and Tombigbee River System and for your consideration of its needs.

BEN ERDREICH
6TH DISTRICT, ALABAMA

COMMITTEE ON BANKING, FINANCE
AND URBAN AFFAIRS

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House of Representatives
Washington, DC 20515

Statement of Rep. Ben Erdreich
Subcommittee on Energy and Water Resources
House Committee on Appropriations
April 14, 1986
Re: Warrior-Tombigbee Development Association Request

Mr. Chairman, I am grateful for the opportunity to submit remarks in support of the budget request of Warrior-Tombigbee Development Association. I join you and the rest of my colleagues in the hope that the House- and Senate-passed authorization bill can be resolved in conference in the next month or so, so that the work of replacing the Oliver Lock can begin. The $10.5 million request is adequate for this task, and I urge its approval.

The Corps of Engineers has requested an additional funding capability of $4.23 million in the operations and maintenance budget to cover the costs of making various channel improvements. I would urge that this additional money be appropriated, since the cost of these small ongoing projects has been coming from the regular O & M budget for several years. The Warrior-Tombigbee Development Association has worked hard to stretch its dollars, but it is getting more difficult for them to cover, internally, the costs of these extra projects.

Mr. Chairman, it is a pleasure to work with the capable and professional people at the Warrior-Tombigbee Development Association, and I have every confidence that they will continue their good work of promoting the waterway and seeing that it remains an economic asset.

STATEMENT OF THE
HONORABLE RONNIE G. FLIPPO
BEFORE THE ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE
APRIL 14, 1986

The Warrior-Tombigbee Waterway

Mr. Chairman, distinguished colleagues. I want to thank you for the opportunity to come before you today to offer my comments on the importance of the Warrior-Tombigbee Waterway to our nation's economic well-being.

A widely-recognized change has occurred over the past decade which has had a significant impact our economy and makes the availability of efficient and cost-effective waterway transportation more important today than at any previous point in history. That change is the globalization of the American economy.

More American-made products are subject to foreign competition today than ever before, both within our domestic markets and in foreign markets where American products and commodities are sold.

Countries in Europe and the Far East have developed highly aggressive and successful strategies for increasing their share of the world agricultural, natural resource and finished product markets. The result has been that U.S. products, through competition, have been crowded out of what were once traditional markets for U.S. goods.

A critical element of our ability to compete internationally is a continuing commitment to developing efficient and reliable means of transporting raw materials and goods. In my home state of Alabama, almost 70% of the coal traffic handled by the Port of Mobile is transported by barge from the Warrior Basin. The

Warrior-Tombigbee Waterway is used extensively to ship agricultural products to the Port of Mobile for export to overseas markets.

The federal stake in the development of the Warrior-Tombigbee has spawned more than $2 billion in non-federal water-related developments in the Warrior-Tombigbee area in the past five years alone. This is ample testimony to the importance of the waterway to economic progress and to the need for a continuing federal commitment for waterway improvements.

In closing, I want to commend the members of this committee for your dedication and commitment to America's waterway transportation system, a federal commitment which began in 1824. The Warrior-Tombigbee is a important element of this system and I urge your support for the FY87 appropriations request for the Warrior-Tombigbee.

STATEMENT

CONGRESSMAN BILL NICHOLS(D-AL.)

APRIL 14, 1986

Mr. Chairman. I want to thank you for giving me the opportunity to appear before your Appropriations Subcommittee today to extend my strong support for the requests that have been made by our waterway systems in Alabama. The work that you and this committee have done during the past few years in maintaining viable waterways throughout the United States is, indeed, highly commendable. and I congratulate you on your successful work. With efforts to reduce government spending being a top priority by this Congress, I recognize the tough decisions that must be made to return fiscal responsibility to the federal government; however. I also share with you the importance of maintaining our waterway systems.

Mr. Chairman, it has been said that a chain is only as strong as its weakest link. Well, in Alabama, we are only one lock away from having a waterway chain strong enough to pull our state and region of the country forcefully into the twenty-first century.

In Alabama. we are blessed with more miles of navigable waterways than any other state. The busiest and most developed of these is the Warrior-Tombigbee. which flows from the coal rich Warrior Basin in northwest Alabama, through its industrial heartland around Birmingham. south to the Port of Mobile. This important waterway now has a system of modern locks and dams with the exception of one lock, William Bacon Oliver. Estimates indicate that %10 of our nation's coal reserves are located in the Warrior Basin. Almost %70 of the coal traffic handled by the Port of Mobile arrives there by barge from the Warrior Basin, and more than 6 million tons of coal move via this waterway to the electric generating plants in our area.

The existing Oliver Lock is so located that substantially all of the cargo using the Warrior-Tombigbee System must pass through it. All of the traffic from the Warrior Basin coal fields and that to and from the industrial area of Birmingham must flow through this bottleneck. The natural drainage and run-off from upland areas causes rapid changes in both flow rates and river levels at this point. This exacerbates the problem of breaking tows apart so as to go through the smaller chamber at Oliver, making it significantly more dangerous as well as more time consuming.

All of the homework is complete on Oliver Lock and its replacement has been authorized. New construction funds are in the President's proposed budget for FY87. The Corps of Engineers anticipates being ready to place the initial contract in July 1986. Oliver Lock is among those few key projects in the national waterway system -- Bonneville, Gallopolis, Lock and Dam 26, and Oliver. The National Waterways Study identifies the need for the replacement of Oliver Lock in the same time frame as these others. If our area is to remain competitive in both national and international markets, we must remove this bottleneck from the system. We can barely compete in world markets today -- and we surely won't be able to if we fail to replace this one lock. Mr. Chairman, this is the one link that makes our chain in Alabama weak. With your help, we can make it strong.

I also want to express my strong support for the continued funding of the operation and maintenance request by the Corp of Engineers for our various rivers throughout Alabama. The request is necessary and your assistance is essential.

I would only add that as your bill comes to the floor, I will look forward to giving you my full support in maintaining a viable waterway system throughout America.

WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

STATEMENT FOR
Subcommittees on Energy & Water Development
United States House of Representatives
United States Senate
April 14, 1986

SUMMARY OF THE REQUEST

The following is a summary of the funding items for the U.S. Army Corps of Engineers for FY86 which bear on the needs of the Warrior-Tombigbee Waterway, and which we ask the Committee to approve:

Warrior-Tombigbee Waterway	
Operations & Maintenance Funds included in Corps' Budget Request	$11,948,000.
Additional Capability Funds for O&M, not included in Corps' Budget Request	4,232,000.
Total O&M Funds Required	$16,280,000.
Funds for New Construction, included in Corps' Budget Request	$10,500,000.
Total New Construction Funds Required	$10,500,000.

Other needs allied to the Warrior-Tombigbee are:

Mobile Harbor	
Operations & Maintenance Funds, included in Corps' Budget Request	$7,112,000
Total O&M Funds Required	$7,112,000.
Funds for New Construction, included in Corps' Budget request	$15,000,000.
Total New Construction Funds Required	$15,000,000.

We wish to highlight the item identified above as Additional Capability. Since this item was not included in the Corps' Budget Request, it is not clear to us whether the Committee has been informed of the essentiality of funding for certain of these Capabilities. We must emphasize the need for additional O&M funds if we are to have an adequate current year program, and to support on-going projects designed to improve safety and efficiency and reduce future costs.

Written statements of support are attached.

Commerce Center P.O. Box [illegible], Birmingham, Alabama [illegible]

WARRIOR-TOMBIGBEE
DEVELOPMENT ASSOCIATION

CHAIRMAN
Sheldon L. Morgan
Senior Vice President
First Alabama Bank of Mobile
Mobile, Alabama

VICE CHAIRMAN
Nicholas J. Barchie, Jr.
President
Warrior & Gulf Navigation Co.
Chickasaw, Alabama

PRESIDENT
Offa S. Nichols, Jr.
[illegible]
Birmingham, Alabama

SECRETARY TREASURER
William A. Powell, Jr.
Vice Chairman
AmSouth Bank N.A.
Birmingham, Alabama

STATEMENT FOR
Subcommittees on Energy & Water Development
United States House of Representatives
United States Senate

I am Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association. Our members represent a cross-section of shippers, carriers and the general business community in the Warrior-Tombigbee basin in Alabama, and eight other states. The Association was formed in 1951 to work for the redevelopment of the Warrior-Tombigbee Waterway System. Construction of the original 17 locks and dams began in the late 1870's and was completed in 1915. The navigation system provided by these locks and dams had gradually deteriorated and by the mid-1950's the annual tonnage had levelled off at 2.5 million tons due to the condition and limited capacity of the obsolete locks.

The Association's objectives have been not only the replacement of the outmoded locks and dams and improvements in the Mobile Bay area, but also the appropriation of sufficient O&M funds to support efficient and reliable navigation. Congress has generally appropriated the necessary funds to support these objectives. There are now only six locks in the 400-plus miles from the head of navigation, located northwest of Birmingham, to the Port of Mobile. During the studies which resulted in this redevelopment, it was projected that by 1980 the Waterway would carry some 8 million tons. These levels were reached in 1966, and by 1980 twice the projected tonnage was being moved on the waterway. Despite the subsequent economic downturn, traffic has begun to grow again, reaching 18 million tons in 1984 and 1985.

The Warrior-Tombigbee Waterway now has a system of modern locks and dams with the exception of one lock, William Bacon Oliver. While prior to the late 1970's the waterway had operated in a generally efficient and reliable manner, we now have a different set of circumstances. These circumstances reflect not only the impressive growth up to now and the ravages of time and the elements, but even more the current economies of world markets. Some estimates indicate that 10% of our nation's coal reserves are located in the Warrior Basin. Two-thirds of the coal exported through the Port of Mobile arrives there by barge from the Warrior Basin, and over 7 million tons of coal move via this waterway to the electric generating plants in our area. Our mines produced the second highest tonnage in history last year, and the Warrior-Tombigbee is essential to their market position. Farmers from Alabama and Mississippi ship their grain to Mobile for export. These farm families are dependent on the waterway for efficient transportation of their products, more important than ever in today's competitive world markets.

Commerce Center P.O. Box 10127 Birmingham, Alabama [illegible]

Shipments of ore, steel and related products are increasing because of new and modern manufacturing facilities at U.S. Steel. The continued efficiency and modernization of the waterway were important in U.S. Steel's recent decision on even further modernization of their Fairfield facilities. A new mini-mill has been built near Tuscaloosa - the first such new facility to be built in this country in 19 years. While we say mini-mill, it represents an investment of $100 million and is on the leading edge of technology. The efficiency and reliability of the waterway will be significant factors in the competitiveness of these new facilities. Thousands of jobs hang in the balance. We believe we are about to have ringside seats at the re-birth of the steel industry in this region.

There are many other commodities moving on the waterway, such as other ores, crude and fuel oils, other steel products, chemicals, aggregates and now, by substantial increased tonnages of wood products. Related industries, though still impacted by the competitive international markets, plan to grow and modernize.

These ever-increasing demands require that the Warrior-Tombigbee operate at peak efficiency on a full-time basis. Our operational efficiency is seriously impaired by the bottleneck caused by the one remaining substandard lock -- Oliver on the Warrior River. This lock has had to be closed several times during the current year for unscheduled maintenance, followed by a scheduled closure of 30 days on very short notice. Oliver, a pre-World War II lock, is 95-460 feet and is smaller than the other five, all of which are the new standard size of 110-600 feet. This necessitates tows being broken apart and utilizing double lockages to pass through. The replacement of Oliver is included in both HR6 and S1567. The Corps is prepared to issue the initial contracts in July and to begin river diversion in November. Lock and dam construction can begin in 1987. Approval of the $10.5 million in new construction funds will permit the Corps to proceed in an orderly and efficient manner. Meanwhile, it is even more important that the remainder of the waterway operates at full efficiency.

Because of the waterway, several billion dollars have been invested by industry, farmers and other governmental agencies, providing thousands of jobs. The Alabama State Docks' $250 million expansion program is complete and this facility now offers the most advanced coal handling technology available in this country. Similar improvements have been made for grain handling and bulk materials. It is interesting to note that the investment by this single local agency far exceeds the federal investment in building all the locks and dams on the entire waterway. We are asking for federal investments that pay off many fold.

These are but examples of how this waterway is so central to the economy of this entire area, impacting both domestic and international markets. Attached with this statement are letters from our members further highlighting this importance. I hope you will note the wide range of interests represented by these statements. Included are financial institutions; public utilities; both deep water and inland port facilities, representing both public and private ownership; coal mining, both deep and surface; manufacturers; agri-business; suppliers; constructors; and, of course, marine interests. These represent a real cross-section of the economic heartbeat of an entire region.

With respect to the actual funding needs, we support the Corps' request for O&M funds for the Warrior-Tombigbee. We are concerned, however, that the requested level of funding, $11.9 million, will not support the kind of O&M program which is required to keep the system reliable and efficient. The funding in the budget request represents the average requirement over the past several years for day-to-day operations. These funds would likely support normal and efficient operations during FY87. However, they will not permit the continuation of an on-going program designed to correct deficiencies of long standing and to handle our increased traffic on an efficient, long-term basis. Work is being done to reduce sedimentation and shoaling, thereby reducing O&M costs in future years. Currently, non-structural measures are underway which will increase efficiency and traffic flow through several reaches of the Tombigbee, thereby enhancing its ability to handle the increased traffic. If the investment in these well thoughtout and cost effective projects is to continue, the shortage is some $4.2 million. In our area, where unemployment has just begun to decline and with basic industry still struggling to get back on its feet and regain a competitive position in tough world markets, this short fall would be devestating.

We note with great pleasure the inclusion of requested New Construction funds in the amount of $10.5 million to begin the construction of the new Oliver Lock. Through the wisdom and steadfast support of the Appropriations Committee, it has been possible to accomplish the planning and design process on an orderly and efficient basis, and the Corps is ready to begin as early as July. We request your support once again for this $10.5 million to begin the actual construction.

The following is a summary of the funding items which bear on the needs of the Warrior-Tombigbee Waterway, and which we ask the Committee to approve:

Warrior-Tombigbee Waterway	
Operations & Maintenance Funds included in Corps' Budget Request	$11,948,000.
Additional Capability Funds for O&M, not included in Corps' Budget Request	4,232,000.
Total O&M Funds Required	$16,280,000.
Funds for New Construction, included in Corps' Budget Request	$10,500,000.
Total New Construction Funds Required	$10,500,000.

Other needs allied to the Warrior-Tombigbee are:

Mobile Harbor	
Operations & Maintenance Funds, included in Corps' Budget Request	$7,112,000
Total O&M Funds Required	$7,112,000.
Funds for New Construction, included in Corps' Budget request	$15,000,000.
Total New Construction Funds Required	$15,000,000.

We believe the Warrior-Tombigbee Waterway is a classic example of the most positive aspects of the Civil Works Program. The Congress saw the potential and supported its program. And now the project continues to demonstrate its worth, having more than doubled the projected tonnage and benefits. I wish to emphasize that the funds which we seek are of the investment category, not expense. This is seed money, spawning reinvestment many times over.

We fully endorse and seek the approval of these items. I, as President of the Warrior-Tombigbee Development Association, our other Officers, our Board of Directors, and our Members appreciate the consideration of the Chairman and members of this Subcommittee and its staff have shown us over the years. We ask for your support once again.

We are attaching additional written statements of support, along with a witness list, representing a cross-section of business, industry and the public.

Thank you for your consideration. We stand ready to answer questions.

WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

LIST OF WITNESSES

The Honorable Howell Heflin - Senator, Alabama
The Honorable Jeremiah Denton - Senator, Alabama

The Honorable Sonny Callahan - Member of Congress, Alabama
The Honorable Bill Dickinson - Member of Congress, Alabama
The Honorable Ben Erdreich - Member of Congress, Alabama
The Honorable Ronnie Flippo - Member of Congress, Alabama
The Honorable Bill Nichols - Member of Congress, Alabama
The Honorable Richard Shelby - Member of Congress, Alabama

Representing Governor George Wallace:
  Mr. W.M. "Bill" Rushton - Director, Alabama Dept. of Economic & Community Affairs
  Mr. Walter Stevenson - Alabama Dept. of Economic & Community Affairs
  Mr. Lambert Mims - Alabama Waterways Development Agency

Mr. Sheldon L. Morgan - Chairman, Warrior-Tombigbee Development Association
  Senior Vice President, First Alabama Bank of Mobile
Mr. N.J. Barchie, Jr. - Vice Chairman, Warrior-Tombigbee Development Association
  President, Warrior & Gulf Navigation Company
Mr. Offa S. Nichols, Jr. - President, Warrior-Tombigbee Development Association
Mr. R.A. Burk, Jr. - River Region Manager, Scott Paper Company
Mr. E.G. Browning - Director of Traffic, Alabama State Docks Department
Mr. R.A. Guthans - President, Tenn-Tom Towing, Inc.
Mr. Les Hudgins - Transportation Manager, Harbert International
Mr. John McCarron - President, Ryan-Walsh Stevedoring Company
Mr. John Mixon - General Manager, Warrior & Gulf Navigation Company
Mr. Tim Parker, Jr. - Executive Vice President, Parker Towing Company
Mr. Marrion Rambeau - Trade & Transportation Mgr., Mobile Area Chamber of Commerce
Mr. Phillip Wiedmeyer - Manager-Governmental Affairs, Alabama Power Company

WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION
WASHINGTON APPROPRIATIONS HEARINGS
LIST OF STATEMENTS

Alabama Electric Cooperative, Andalusia, AL
Alabama Power Company, Birmingham, AL
Alabama State Docks Department, Mobile, AL
American Commercial Barge Line, Harahan, LA
AmSouth Bank N.A., Birmingham, AL
Chicago Bridge & Iron Company, Birmingham, AL
Dixie Carriers, Inc., Houston, TX
Dravo Basic Materials, Inc., Mobile, AL
Drummond Coal Company, Jasper, AL
First Alabama Bank of Mobile, Mobile, AL
Gulf Power Company, Pensacola, FL
Harbert International, Birmingham, AL
Harrison Bros. Dry Dock & Repair Yard, Mobile, AL
Hunt Refining Company, Tuscaloosa, AL
International Paper Company, Monroeville, AL
Jasper Area Chamber of Commerce, Jasper, AL
Lapeyrouse Grain Corporation, Mobile, AL
Mississippi Power Company, Gulfport, MS
Mobile Area Chamber of Commerce, Mobile, AL
Parker Towing Company, Tuscaloosa, AL
Southern Company Services, Birmingham, AL
SouthTrust Bank of Alabama, Birmingham, AL
Soya Grain Company, West Point, MS
State of Alabama, Office of the Governor
State of Alabama, Dept. of Economic & Community Affairs
State of Alabama, Al. Waterways Development Agency
Tenn-Tom Towing, Inc., Mobile, AL
U.S. Steel Corporation, Fairfield, AL
Volkert & Associates, Inc., Mobile, AL
Vulcan Materials Company, Birmingham, AL
Jim Walter Resources, Inc., Brookwood, AL
Warrior & Gulf Navigation Company, Mobile, AL

STATE OF ALABAMA

[illegible]

April 14, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Appropriations for
Energy and Water Development
United States
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I appreciate this opportunity to appear before this Subcommittee today along with my fellow Alabamians in support of navigation on the Black Warrior-Tombigbee Waterway in Alabama. Specifically, I endorse the request of the Warrior-Tombigbee Development Association and its supporters for continued funding of the full-time operation and maintenance of the Black Warrior-Tombigbee Waterway and of Mobile Harbor. Also, I want to thank this Subcommittee for its assistance in guiding the Authorizations Committee in their approval of the new Oliver Lock replacement and the Mobile Deep Harbor Project.

In Alabama, we are blessed with strategically-located navigable waterways. The busiest of these inland waterways is the Black Warrior-Tombigbee Waterway which flows from the coal rich Warrior Basin in northwest Alabama through its industrial heartland near Birmingham, southward via Tuscaloosa, Demopolis, and Jackson, to the Port of Mobile. This waterway is now linked to all of mid-America and the Great Lakes via the Tennessee-Tombigbee Waterway.

The chief commodities moved by the waterway are coal and grain. Over 6 million tons of coal move via this waterway to the electric generating plants in our area. Almost 70 percent of the coal traffic handled by the Port of Mobile arrives there by barge from the Warrior Basin for export to other areas of the United States and foreign countries. In addition, farmers from 21 Alabama and Mississippi counties ship their grain to Mobile for export via the waterway. There are many other commodities moving on the waterway, such as ores, crude and fuel oils, steel products, chemicals, aggregates and wood products. Related industries, though still impacted by the world-wide recession, plan to grow and modernize. Tonnage moved on the waterway reached 18 million tons in 1984, the latest year for which we have official information.

Ever-increasing demands require that the Black Warrior-Tombigbee Waterway operate at peak efficiency on a full-time basis. This efficiency is seriously impaired by the bottleneck caused by the one remaining substandard lock -- the Oliver Lock on the Warrior River. This pre-World War II lock, smaller than the other five locks on this system, which are the new standard size of 110 by 600 feet, necessitates tows being broken apart and utilizing double lockages for passage. This magnifies the need for complete efficiency and reliability of the remainder of the system. I appreciate your support and approval of the $10.5 million authorized for FY 87 to initiate construction of the new Oliver Lock replacement. This level of funding will support the timely and orderly placement of contracts and the other work which should be done in FY 87.

I join with the Warrior-Tombigbee Development Association in support of the Corps of Engineers' request for $11.948 million for the regular operations and maintenance (O&M) program of this waterway. However, we believe that $11.948 million will be inadequate for an effective O&M program. This is below the average amount which has been required over the past five years. This is a serious deficiency and threatens the future of efficient and reliable water commerce. Several projects, which are underway and designed to improve channel efficiency and reduce future costs, could not be continued with the proposed funding level of $11.948 million. Therefore, we request that $4.232 million be added to this budget item, making a total of $16.18 million for the 1987 O&M program.

Also, I support the Association's request for adequate funding for the operation and maintenance of Mobile Harbor. Mobile Harbor is vital to the ongoing operations of the Port of Mobile and the Black Warrior-Tombigbee Waterway. Over the past eight years, the State of Alabama through the Alabama State Docks Department, has invested over $250 million in expanded and improved Port facilities. It is interesting to note that these State investments far exceed the federal investment in building all the locks and dams on the entire waterway. In addition, I authorized creation of the Alabama Waterways Development Agency in 1985 to promote the development and utilization of all Alabama's waterways. My representatives have also been involved in the formation of the Gulf States Intracoastal Waterway Coordinating Committee, along with representatives of the states of Florida, Louisiana, Mississippi, and Texas, to provide a forum for discussion of issues and opportunities related to the utilization of the Gulf Intracoastal Waterway.

I join with the Warrior-Tombigbee Development Association in support of these appropriations and confirm my continuing commitment to fulfill Alabama's part of these projects in the future. The State of Alabama has already expended millions of dollars in support of navigation on this waterway and will continue to provide the necessary resources to maintain it as a viable part of the inland waterway system.

Again, I appreciate this opportunity and thank this Subcommittee for its faithful support over the years.

Sincerely,

George C. Wallace

George C. Wallace

GCW/adt

Alabama Department Of Economic And Community Affairs

GEORGE C. WALLACE
GOVERNOR

W.M. "BILL" RUSHTON
DIRECTOR

April 14, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Appropriations for
Energy and Water Development
United States
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I wish to express my thanks to you for the opportunity to address this Subcommittee today along with my fellow Alabamians in support of the Black Warrior-Tombigbee Waterway. I want to restate my strong and continued support for a fully-funded operation and maintenance program by the Corps of Engineers for the Black Warrior-Tombigbee Waterway and for Mobile Harbor. Also, I support approval of additional funds to the Corps of Engineers to initiate construction of the new Oliver Lock.

The Black Warrior-Tombigbee Waterway is the most efficient of Alabama's inland waterways. It is linked to world markets via the Port of Mobile, and now to all of mid-America and the Great Lakes via the Tennessee-Tombigbee Waterway. During 1984 we understand that tonnage on the Black Warrior-Tombigbee Waterway totalled 18 million tons. This shows continued and substantial growth when compared to 1966 figures of 8 million tons. The Black Warrior-Tombigbee Waterway provides efficient transportation for approximately 70 percent of Alabama's coal production which is exported through the Alabama State Docks at Mobile and for the grains shipped by farmers to Mobile from 21 Alabama and Mississippi counties.

Other important commodities such as ore, steel, forest products, petroleum, chemicals and aggregates move on the Black Warrior-Tombigbee Waterway to the Gulf of Mexico via the Gulf Intracoastal Waterway en route to other parts of the nation and the ports of the world.

3465 Norman Bridge Road • P.O. Box 2939 • Montgomery, Alabama 36105-0939 • (205) 284-8700

We support a request of at least $16.18 million for the regular operations and maintenance (O&M) program of this waterway. The Corps of Engineers' request for $11.948 million is an inadequate amount for an effective operations and maintenance program on the Black Warrior-Tombigbee Waterway. This proposed amount for O&M is below the average amount which has been required and necessary over the past five years. This deficiency would seriously threaten the future of efficient and reliable water commerce on the Black Warrior-Tombigbee Waterway. With our unemployment still among the highest in the nation, and with basic industry still struggling to become competitive and get back on its feet, this would be devastating to our area. With this amount, several Corps' projects underway that are designed to improve channel efficiency and reduce future costs could not be continued.

Also, we support approval of the $10.5 million request by the Corps of Engineers to initiate construction of the new Oliver Lock replacement. The existing lock, built before World War II, is substandard in design and dimension compared to the other five locks on this waterway, which were completed and opened to navigation between 1954 and 1975 and meet current design standards. The existing Oliver Lock is a serious bottleneck on the waterway. It is imperative that construction on the new lock begin as soon as possible, before the existing lock reaches the practical upper limit of tonnage capacity. We believe this level of funding will support the timely and orderly placement of contracts and the other work which should be done in FY 87.

Also, I support the Association's request for adequate funding for the operation and maintenance of Mobile Harbor. Mobile Harbor is vital to the ongoing operations of the Port of Mobile and the Black Warrior-Tombigbee Waterway. The Alabama State Docks at the Port of Mobile is completing a $250 million expansion program, and this facility offers the most advanced coal-handling technology available in this country. This state investment far exceeds the federal investment for constructing all the locks and dams on the entire waterway.

In closing, I affirm my support and that of the Alabama Department of Economic and Community Affairs. I can assure you that the State of Alabama will continue to meet its responsibilities and obligations for these projects. I appreciate the support and assistance which you and all the members of the Subcommittee have given us over the years in insuring adequate funding is provided for the full-time operation and maintenance of the Black Warrior-Tombigbee Waterway.

Sincerely,

Bill Rushton

W. M. "Bill" Rushton
Director

WMR/adt

Alabama Electric Cooperative, Inc.
Post Office Box 550
Andalusia, Alabama 36420
(205) 222-2571

Charles R. Lowman
General Manager

March 20, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Re: FY87 Corps of Engineers Funding For
Warrior-Tombigbee Waterway and Port of Mobile

Dear Congressman Bevill:

On behalf of Alabama Electric Cooperative, Inc. and its member systems, I would like to request your support of FY87 Corps of Engineers funding for the Warrior-Tombigbee Waterway and the Port of Mobile.

AEC depends on water transportation for its primary movement of coal; therefore, adequate funding for the Warrior-Tombigbee Waterway and Port of Mobile is essential for AEC to provide reliable and low-cost electric power to its member systems. AEC's service area is mostly agricultural/forest related industry and is still severely depressed except two small areas along the Alabama-Florida Coastline.

AEC supports the Corps of Engineers' budget request; however, we feel it needs to be increased. A more detailed statement is attached giving some of our reasons why sufficient funding is necessary to continue programs that are critical to the efficiency and reliability of the navigation channel and to the reduction of future maintenance costs.

We do hope we can count on your support in this matter which is vital to AEC and its members.

Sincerely,

Charles R Lowman

Charles R. Lowman
General Manager

CRL:elf

Attachment

cc: Mr. Offa S. Nichols, Jr. w/attachment
President, Warrior-Tombigbee Development Association

—THE COUNTRY'S MOST EXPERIENCED POWER SUPPLY COOPERATIVE

STATEMENT FROM ALABAMA ELECTRIC COOPERATIVE, INC. IN SUPPORT OF FY87 CORPS OF ENGINEERS FUNDING FOR THE WARRIOR-TOMBIGBEE WATERWAY AND PORT OF MOBILE

Alabama Electric Cooperative, Inc. (AEC)--a generation and transmission cooperative with headquarters in Andalusia, Alabama--supplies wholesale electrical energy to sixteen rural distribution cooperatives, four cities and two industries in South Alabama and the panhandle of Northwest Florida. A major portion of this energy is generated at AEC's Tombigbee Plant located near Jackson, Alabama on the Black Warrior-Tombigbee Waterway (BWT). The Tombigbee Plant is fired by coal and can receive coal by rail and barge. However, the current cost per ton for transportation to the Tombigbee Plant via the BWT Waterway is approximately 52 percent less than via rail. Fuel and transportation represent approximately 32 percent of AEC's operating cost. Therefore, an efficient and reliable BWT Waterway is of the upmost importance to AEC, its member systems and their consumers.

The first 65 MW unit at AEC's Tombigbee Plant went into commercial operation in 1969, then two 225 MW units--one in 1979 and the other in 1980. In 1969 approximately 200,000 tons of coal were moved to the Tombigbee Plant via the BWT Waterway. This tonnage has continued to increase since 1969, with 683,306 tons shipped in 1985, and plans are to move 770,000 tons via the BWT Waterway to the Tombigbee Plant in 1986. Within the next two to three years the Tombigbee Plant will be operating at its maximum capacity and it is estimated that up to one million tons will be delivered by the BWT Waterway at that time.

In addition to the movement to the Tombigbee Plant, AEC has recently purchased a site located on the BWT Waterway in Choctaw County, Alabama for a future fossil-fired plant. One of the prime reasons for selecting this site was the availability of water transportation afforded by the BWT. It is projected that the first unit will be needed some time in the mid-1990's and will burn approximately one million tons per year. This site will be able to accommodate four units, and with all four in operation the annual consumption would be approximately four million tons.

The Tombigbee Plant is located on the back side of a 90 degree bend on the BWT and this causes the barge unloading area to silt-in during periods of high water and necessitates the dredging of this area annually. In addition to the two to four weeks required for dredging there is usually two weeks lost due to high water. This plant is located below the last lock and dam on the BWT and has no flood control. If there is a scheduled or unscheduled lock outage on the BWT --of which there is usually one 30-day outage annually--this only adds additional time to the normal four to six weeks that the Tombigbee Plant is unable to receive barge coal.

With the above mentioned loss of barge transportation to the Tombigbee Plant, AEC is concerned that even more down time will result if sufficient funds are not made available for operation, maintenance and channel improvements for the BWT. This will force AEC to utilize rail transportation to a greater extent which will result in higher cost for electrical energy for its member systems and their ultimate consumers.

The service area of AEC's member systems is primarily agricultural/forest related industry and is still severely depressed with the exception of two small areas along the Alabama-Florida Gulf Coast. If these depressed areas are going to recover, they desperately need electrical energy at the lowest possible cost.

Unfortunately, these rural consumers are already paying a higher cost for electrical energy than their urban counterpart due to the cost encountered in providing electrical service to sparsely populated areas versus high density areas.

AEC is of the opinion that the proposed $11.9 million for operations and maintenance for the BWT is inadequate and will not allow the continuation of the ongoing deficiency channel correction program. The work that has been underway for several years to improve dredging and reduce shoaling on the BWT will have to be discontinued or terminated. Continuation of the deficiency correction program is critical to the efficiency and reliability of the BWT and to the reduction of future maintenance cost. AEC feels additional funds should be made available to ensure an adequate operation and maintenance program and a continuation of the channel improvement work for the BWT and Mobile Harbor.

The $10.5 million budget proposal to initiate construction of the new Oliver Lock is supported by AEC. Approval of this funding is essential to the timely and efficient contract placement to eliminte this old antiquated lock from an otherwise modern and efficient waterway.

For the above stated reasons, AEC fully supports the testimony of Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association, before your Subcommittee.

Thank you and your Subcommittee for allowing AEC to submit this statement.

Sincerely yours,

Charles R. Lowman

Charles R. Lowman
General Manager

600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35.
Telephone 205 250-1000

Joseph M. Farley
President

Alabama Power
the southern electric system

February 28, 1986

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20510

Dear Congressman Bevill:

The Warrior-Tombigbee Waterway is vital to the economic health of Alabama. The state's water transportation system must be efficient and well-maintained for the basic industries, such as mining and heavy metals, to provide a sound economic base for the state and for Alabama to enjoy economic growth.

Alabama Power Company's continued interest in the Warrior-Tombigbee Waterway is two-fold. First, our business is dependent on the general economic health of the state; and, second, we are a primary user of the waterway. For nearly three decades, we have used economical water transportation to deliver coal to two of our major electric-generating plants.

Four of Alabama Power Company's seven fossil-fueled, electric-generating plants are located on the Warrior-Tombigbee Waterway system. Coal from the Warrior coal field is delivered to two plants near the coal field and loaded onto barges for shipment to two generating plants in the southern and central parts of Alabama. The 1,525-megawatt Plant Barry in Mobile County, which began operation in 1954, is supplied primarily by the Warrior-Tombigbee Waterway, as is the 500-megawatt Plant Greene County near Demopolis.

We have two major concerns about the Warrior-Tombigbee Waterway. The pre-World War II Oliver Lock's capacity is inadequate, and this creates a bottleneck which impedes efficient operations on the river. Funds budgeted to initiate construction of the new Oliver Lock should be approved. Also, adequate funds for operation and maintenance must be made available to the Corps of Engineers to continue efficient operation of the waterway and to avoid expensive and unnecessary interruptions to river traffic.

Alabama Power Company received 4.5 million tons of coal in 1985 which were transported on the Warrior-Tombigbee Waterway. This represented 30 percent of the 15 million tons used to generate electricity for our customer's use. Failure to replace Oliver Lock or to properly maintain the waterway can have a significant adverse effect on the cost of providing electric service to Alabama Power Company's over 1,000,000 customers.

Alabama Power Company supports the collective effort of the Warrior-Tombigbee Development Association, of which it is a member, to obtain the replacement of Oliver Lock and to obtain for the Corps of Engineers an adequate operations and maintenance budget which will ensure the long-term, efficient and economical viability of the waterway.

Sincerely,

Joseph M. Farley

Joseph M. Farley

JMF:gea

STATEMENT OF
ROBERT M. HOPE, DIRECTOR
ALABAMA STATE DOCKS DEPARTMENT
ON BEHALF OF
THE WARRIOR-TOMBIGBEE WATERWAY
BEFORE
THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN
WASHINGTON, D. C., APRIL 14, 1986

Mr. Chairman:

The Alabama State Docks Department would again this year like to express its appreciation to this Subcommittee with respect to its energies and dedications with regard to your diligent and enduring support of our nation's great Waterway Systems, and to once again recognize the value of these annual Hearings on behalf of one of America's greatest assets.

The Warrior-Tombigbee River System ranks very high among our national waterway assets and its operation and maintenance are of vital importance to the State of Alabama and the Alabama State Docks Department. The Alabama State Docks Department has been involved in a continuing program of renovation of its existing facilities and new construction and expansion programs which over the last ten years has resulted in expenditures of $250 million targeted at giving the Department's facilities at the Port of Mobile the newest and most technologically advanced deep-water terminal cargo handling facilities.

The Department's Bulk Handling operations at the Port of Mobile and at the Alabama State Docks are vital to the State of Alabama as well as the MidAmerica Region of the United States, and together with our Inland Waterway System function as an expedient and cost effective means of shipping products produced and manufactured in the State of Alabama into worldwide markets. Volume shipments of grain move annually from inland elevators located on the Warrior-Tombigbee Waterway by barge to the Port of Mobile for subsequent export to consuming nations around the world, and the system acts as a major conduit for large, annual coal volumes which move to the Port of Mobile and are handled through the Department's McDuffie Export Coal Handling Plant. Just this past year export coal handled at Mobile increased by a million and a half tons up to a record high of ten million tons, representing the largest commodity handled at the Port and making the Port of Mobile one of the few ports in the nation where export tonnages outranked import tonnages.

Major shipments of bulk ores are handled through the Department's Bulk Material Handling Plant and a large percentage of this tonnage moves on the Waterway System.

The highly competitive posture of the Alabama State Docks and the Port of Mobile is a direct result of the Port's enviable inland transportation infrastructure. Four major rail lines and one regional rail carrier serve the Port of Mobile; however, it is the State's inland river system that continually gives the Port its competitive edge.

Although the State of Alabama is blessed with 2,000 miles of navigable waterway and also now enjoys the benefit of the newly completed Tennessee-Tombigbee System, the Warrior-Tombigbee is still the heavier utilized system in the State at this time and constitutes a major transportation artery for coal, iron ore and grain.

This Waterway, its operation and maintenance are of vital importance to the Alabama State Docks, the Port of Mobile, as well as the State of Alabama.

Fiscal Year 1987 allocation for operation and maintenance of the Black Warrior Tombigbee River is leveled at $11.9 million; however, it is felt that this would not be sufficient to do more than nominal O.&.M, and for continuance of the ongoing deficiency correction program which is improving dredging disposal and reducing shoaling additional capability funding would be required.

The budget also proposes $10.5 million to initiate construction of a new Oliver Lock, and approval of this amount is critical to the timely and efficient contract placement to remove this present costly bottleneck.

Mr. Chairman, the Alabama State Docks Department appreciates the opportunity to appear before this Subcommittee today, and we are grateful for the time and consideration of the Committee. The Department, in concert with the Warrior-Tombigbee Association and the Governor of the State of Alabama, offers its support for the testimony of Mr. Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association.

Not only is this Waterway vital to the interest of Alabama in that it provides an economic mode of transportation, it also has the national effect through the movement of export coal and grains of offering this country vital assistance in bringing the balance of our deficit in trade and payments

The River System is energy efficient and constitutes an integral part in local, national and international trade, and we at the Alabama State Docks Department pledge our unerring support to its continued development.

American Commercial Barge Line Company
P.O. Box 23206
Harahan, Louisiana 70183

March 4, 1986

Honorable Tom Bevill, Chairman
Subcommittee on Appropriations for
Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Mr. Bevill:

I am writing on behalf of American Commercial Barge Line Company to express our support of the Warrior-Tombigbee project and to suggest increases in the operating budget for the Corps of Engineers. As you may know, our company operates a fleet of towboats and barges on the inland river and canal system. We provide a cost effective transportation link between America's inland industries and its foreign shipping ports. One of the waterways upon which we operate is the Warrior-Tombigbee system which flows to the port of Mobile, Alabama. Our current operation in this area includes transporting coal from Holt, Alabama, Port Osborne, Alabama, and Coal Systems Inc. dock at Mile 372 on the Warrior River to Gulfport, Mississippi. We project shipments of coal and chemicals on this river system totaling over 1.0 million tons in 1986. For many years, the Warrior-Tombigbee system was limited to four barge tows because of narrow channels, rocky bottoms, and old inefficient locks. Recent improvements in the waterway have expanded the river to six barge tow capacity. These improvements have drastically increased our company's efficiency and consequently lowered the cost per ton of material moved. Continued channel maintenance and replacement of Oliver Lock will allow our company and others to provide cost efficient, reliable transportation of commodities through the Port of Mobile. We actively support the efforts of the Warrior-Tombigbee Association because we feel its work is of great importance to the Port of Mobile, the Gulf Region of the United States, and the country as a whole. We urge your subcommittee to carefully consider and highly credit the testimony of the Association's President, Mr. Offa S. Nichols. Our company applauds the efforts currently being made by the Federal Government to reduce waste and trim the budget. We must caution, however, that the transportation links of our nation must not only remain strong, but they must continue to grow and improve to keep abreast of foreign competitors. The health of American industry depends on its ability to be cost competitive.

This brings up the matter of the proposed Corps of Engineers budget for Fiscal Year 1987. While we support the Corps' budget request, we feel the funds allotted are inadequate for proper operations and maintenance of the Warrior-Tombigbee river system. The Operations and Maintenance budget of $11.9 million is probably sufficient for maintaining a navigable channel, but this amount is insufficient to fund the continuing deficiency correction program. This river system needs to be improved as well as maintained. We applaud the funding for the replacement of Oliver Lock. This will bring real benefits to all the users of the river.

Honorable Tom Bevill, Chairman
Subcommittee on Appropriations for
Energy and Water Development
Washington, D.C. 20515

Continued: Page 2

We hope you will carefully consider the comments made in this letter, and if we can be of further assistance to your subcommittee, do not hesitate to contact our company.

Very truly yours,

Norman S. Ivey
Vice President

NSI/mm

AmSouth Bank N.A.
Post Office Box 11007
Birmingham, Alabama 35288
(205) 326-5206

William A. Powell, Jr.
Vice Chairman of the Board

AMSOUTH

March 11, 1986

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Mr. Bevill:

I am certain that testimony before your committee will point out how vital the Warrior-Tombigbee Waterway is to the State of Alabama and to our economy. Our bank, the largest financial institution in Alabama, serves communities and people throughout the state, many of them located along the waterway or nearby, who depend on this river system for a major portion of their economic well-being.

I serve as a Director of the Warrior-Tombigbee Waterway Association (and as its Secretary-Treasurer) and have worked with the Association for a number of years. From my perspective, the amount of appropriation proposed for Operations and Maintenance of this system - $11.9 million - will not suffice to support dredging disposal, reduction of shoaling and other necessary programs to keep the waterway in the condition that is necessary.

The new Oliver Lock (with a budget proposal of $10.5 million) is also vital to the continued use of the river system.

I support that program as well as the appropriate funding for Operations and Maintenance and other construction on the system and in Mobile Harbor.

I appreciate your consideration.

Sincerely,

William A. Powell, Jr.

William A. Powell, Jr.

WAP,Jr./bc

CBI

CBI Services, Inc.
P.O. Box 277
Birmingham, Alabama 35201

205 595 1191

March 14, 1986

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
 for Energy & Water Development
U. S. House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

On April 14, 1986, the Warrior-Tombigbee Development Association will be giving testimony before the House Appropriations Committee on FY87 Corps of Engineers funding for the Warrior-Tombigbee Waterway and Port of Mobile. The group will be led by Mr. Offa S. Nichols, Jr., president of the Development Association.

As a member of this association, we have participated in the collective efforts to improve the efficiency and reliability of the Warrior-Tombigbee Waterway, because it results in lower fright costs for our products and contributes significantly to efficiency in energy consumption. The importance of this in enhancing local, national and international trade is clear.

In early 1970, my company commenced construction of a multimillion dollar fabricating facility on the Warrior River in Cordova, Alabama, which opened for business in 1974. This plant is equipped to fabricate, machine, weld, test and load onto barges extremely large and heavy steel vessels for use in the nuclear and petroleum industries, as well as in other industries such as chemical processing, pulp and paper, water and waste treatment and others. A significant part of our present capacity is dedicated to work on important Department of Energy and Department of Defense contracts. We anticipate that this type of work will continue for a considerable length of time at our Cordova facility.

We strongly support the Corps of Engineers' budget request for O&M construction funds for the BWT and Mobile Harbor. We do feel, however, that the amount proposed will support only minimal operations tasks and will not be sufficient to allow continuation of actions underway for several years to improve dredging, disposal and reduction in shoaling. These programs are critical to the efficiency and reliability of the navigation channel and to the reduction of future maintenance costs, and we feel additional funds should be made available for these programs.

We respectfully request your dedicated support.

Sincerely,

Ralph C. Neely
Plant Manager

DIXIE CARRIERS, INC.
OFFSHORE AND INLAND WATER TRANSPORTATION
1717 ST JAMES PLACE
PO BOX 1537 HOUSTON TEXAS 77251
TWX 910-881-3702 713-622-5502

March 18, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

This letter is sent to you on behalf of Dixie Carriers, Inc. Dixie Carriers, Inc. is a major diversified water carrier which provides service to the public through the transportation of all types of bulk cargoes. Our area of operations is the Inland Waterways of the United States.

Dixie Carriers, Inc. has operated on the Warrior-Tombigbee System for many years. We also utilize the Port of Mobile on a frequent, regular basis for both inland and offshore operations.

The recent opening of the remainder of the Warrior-Tombigbee Waterway has created additional opportunities for water transportation. Chemicals and coal, moving to and from the Tennessee River by water and other modes, will now have an alternate, and in many cases, more economical route. The Waterway also provides a relatively ice free route to service ports on the Tennessee and lower Ohio Rivers if the Mississippi River is restricted by ice in the winter months.

The importance of adequate funding for the Waterway and the Port of Mobile is paramount. We support the current Corps of Engineers budget request for O&M and planning funds. However, additional funds should be made available to provide levels which will allow adequate O&M programs and the continuance of channel improvements.

Yours very truly,

DIXIE CARRIERS, INC.

J. H. Pyne
President

JHP:jo

DRAVO BASIC MATERIALS COMPANY, INC.

P. O. Box 2068
Mobile, Alabama 36652
205 432-2651

SOUTHEASTERN DIVISION

A Dravo Company

April 14, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

The Warrior-Tombigbee Waterway along with the other waterways of the State of Alabama are invaluable links to a successful Port of Mobile and the economic growth in South Alabama. Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association, will present testimony stressing the need for maintaining and enhancing the efficiency and reliability of the Warrior-Tombigbee System as well as the importance of low-cost, energy efficient water transportation to local, national and international trade. We fully support and endorse his testimony.

Dravo Basic Materials Company, Inc. is one the leading producers of construction raw materials and aggregates on the Gulf Coast. We rely extensively on the waterways of Alabama, Florida, Louisiana, Mississippi and Texas for production and delivery of our products. In 1985 we transported via Alabama waterways in excess of 1,400,000 tons of sand and gravel. We also transported over 125,000 tons of limestone as well as significant quantities of other products. Our projections for 1986 are:

Sand and Gravel	1,500,000 tons
Other	250,000 tons

Dravo Basic Materials Company, Inc. operates a fleet of 23 boats, 85 barges and 7 dredges. We maintain a large terminal and handling facility on McDuffie Island in Mobile, Alabama in addition to numerous support facilities throughout South Alabama and the Gulf Coast.

The maintenance of authorized project dimensions is essential for the efficient, orderly production and delivery of materials throughout the waterway system. In order to provide this capability, it is imperative that the Army Corps of Engineers be provided with the appropriations necessary to continue the maintenance and development of the Warrior-Tombigbee Waterway System as requested in the fiscal year 1987 budget.

It is also requested that additional funds be provided to insure that the Corps has the capability and flexibility necessary to maximize the utilization of the Waterway System and Mobile Harbor. Additionally, the provision for planning funds to replace the outmoded Oliver Lock should not be overlooked.

We sincerely appreciate the Committee's faith in the future of the State of Alabama and welcome its continued support of these vital projects.

Yours very truly,

Leon M. Torbert, Jr.

/vr

STATEMENT OF JEROME DRUMMOND

DIRECTOR OF PORT OPERATIONS

DRUMMOND COAL COMPANY

PRESENTED TO

HONORABLE TOM BEVILL, CHAIRMAN

HOUSE SUBCOMMITTEE ON APPROPRIATIONS

FOR ENERGY & WATER DEVELOPMENT

HOUSE OF REPRESENTATIVES

WASHINGTON, D. C. 20515

APRIL 14, 1986

The following is a statement in support of improving the efficiency and reliability of the Warrior-Tombigbee Waterway and the Port of Mobile.

Drummond Coal Company was founded in 1935 by Mr. Heman Drummond who developed his first mine underground near Sipsey, Alabama. It was a drift mine, angling into a hillside from which men dug and mules hauled the bituminous Appalachian coal. Many of Mr. Drummond's customers were local people who needed coal for home heat. As his sons grew up, they joined him and the family opened their first surface mine using small diesel shovels. Half a century has passed since Mr. Drummond produced his first ton of coal.

Today, Alabama is a major coal producing and exporting state. Drummond Coal Company is the largest surface coal producer, one of the largest coal exporters in the southeastern United States, and one of the top twenty non-captive bituminous coal producers in the nations. Drummond serves metallurgial, utility and specialty coal customers on four continents from mines in six counties in north central Alabama. Drummond Coal Company alone presently employs in excess of 4,500 people with an annual payroll of approximately $120,000,000.

About 90% of the state's coal production, including most of Drummond's, comes from the Warrior Field located in north central Alabama. The Warrior Field or Warrior Basin as it is also known, is a basin-like geological structure covering more than 3,500 square miles and underlying parts of Winston, Marion, Fayette, Tuscaloosa, Cullman, Blount, Jefferson and all of Walker County. The field is cut through by the Warrior River system which has led to the development of mines using water transport.

Alabama's system of riverways offers water transport of national and international destinations via the McDuffie Coal Terminal at the year-round Port of Mobile on Alabama's Gulf Coast. Barging in Alabama is a particularly good way to move coal because of the extent of Alabama's waterways and because of the coal handling facilities available.

Drummond ships this coal from five different coal loading facilities located at various points on the Warrior River system, two of which are company owned and operated. Drummond owns and operates a barge loading facility located at milepost 354 on the Warrior River in conjuction with its Kellerman mining operation. This barge loading facility handles about 1,400,000 tons of production at the Kellerman Mine and 2,000,000 tons of production for the Jim Walter Corporation. Another company owned barge loading facility is located at milepost 401.5 on the Locust Fork portion of the Warrior River in conjuction with Drummond's Short Creek operation. This barge loading facility has the optential to handle approximately 1,000,000 tons per year at Port Birmingham which is located at milepost 399 on the Warrior River.

Obviously, reliance upon Alabama's efficient system of waterways has been a very integral part of Drummond Coal Company's planning and operations to date. Availability of an economical and efficient mode of transportation is important to any industry in getting the product to market; however, because of the national and international markets for coal, efficient transportation modes are even more critically important to the coal industry.

This reliance by Drummond Coal Company on the Warrior-Tombigbee System and the Port of Mobile is seriously threatened by the 1987 fiscal year budget proposals for the Corps of Engineers. Reduced operation and maintenance for the Warrior-Tombigbee would be crippling for the coal industry in Alabama. The amount planned for the O & M money for the Warrior-Tombigbee is inadequate based on past history of the water system. The amount proposed for BWT Operations & Maintenance is $11.9 million. This would probably support the bare bones operations tasks, but would not allow the continuation of the on-going deficiency correction program. For example, actions underway for several years to improve dredging disposal and reduce shoaling would have to be discontinued or terminated. Continuing these programs are critical to the efficiency and reliability of the navigation channel and to the reduction of future maintenance costs. We need the "additional capability" funding.

By transporting its high quality coal product by an available and efficient waterway system, Drummond has been able to compete with other coal exporting nations in a successful manner and has contributed to reducing the current national trade deficit.

To date, significant delays are caused in the efficient movement of traffic on the Warrior-Tombigbee System by use of the small, pre-World War II Oliver Lock located on the Warrior River. Because this lock is able to handle only a four barge tow, this necessitates having to break down the barge configuration prior to moving through this lock which, even with a six barge tow, amounts to doubling the lockage time necessary to move through this lock. This one lock alone creates a bottleneck in the orderly flow of traffic on the Warrior-Tombigbee System. The budget proposes $10.5 million to initiate construction of the new Oliver Lock. Approval of this amount is critical to the timely and efficient contract placement to remove this dangerous and costly bottleneck.

Drummond Coal Company is a member of the Warrior-Tombigbee Development Association. We strongly support the testimony given today by Mr. Offa S. Nichols, Jr., President of the Association, and heartily endorse the collective effort of the Association to improve the efficiency and reliability of the Warrior-Tombigbee Waterway. Traffic on the waterway presently represents only a small percentage of the river's ultimate capacity; given the needed improvements to the Oliver Lock and a continued commitment to a federally constructed and maintained inland waterway system are granted. Certainly, the federal investment in the Warrior-Tombigbee River System has paid dividends many times over with the improved economic development is the area which the Warrior-Tombigbee River System serves.

Drummond Coal Company

Jerome Drummond
Director of Port Operations

First Alabama Bank

First Alabama Bank
Mobile
Post Office Box 2527
Mobile, Alabama 36622-000

Sheldon L. Morgan
Senior Vice President

February 26, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for
Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

The Port of Mobile is a major factor in the economy of Alabama and the U. S. Gulf Coast. Important to us are those factors impacting this economy and, certainly, the Warrior-Tombigbee Waterway is a vital factor in this area. It serves the manufacturing and mining region and all the agricultural areas and industrial production facilities in western Alabama. The waterway has served as an economic stimulant for one hundred years, having been periodically improved until today, it is a modern system with one major exception, the Oliver Lock and Dam, which needs replacing.

This waterway is currently handling most of the coal moving out of Mobile for export. Many basic materials move on this system and it is important that funds for an adequate Operations & Maintenance program be appropriated for the BWT. The budget item requested by the Corps of Engineers is not adequate, based on past history. This should be carefully considered.

The Corps of Engineers report on the replacement of Oliver Lock has now been approved by the Board of Engineers for Rivers and Harbors, and they are ready to commence construction for this replacement. We request $10.5 million to initiate this program. It is important that this continuing process not be interrupted.

The monies we are requesting are a valid investment by the Federal Government, which will continue to be matched many times over by local investment.

Sincerely,

Sheldon Morgan

Sheldon L. Morgan

SLM/mal

March 27, 1986

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington D.C. 20510

Dear Congressman Bevill:

Gulf Power Company is an investor-owned electric utility and a member of The Southern Company; we serve 257,693 customers in the Florida panhandle. Our Company utilizes coal for over 99 percent of its total generation requirements within Florida and consumes approximately 2.9 million tons per year. Over 95 percent of our coal deliveries in Florida are dependent upon waterway transportation.

Gulf Power currently moves approximately 1.0 million tons of coal on the Warrior-Tombigbee Waterway and/or through the Port of Mobile. The remainder of Gulf's coal delivered over the national river systems originates from the Southern Illinois Coal Basin vicinity and travels down the Mississippi River through the Port of New Orleans. From the ports of New Orleans and Mobile, all waterway deliveries travel via the intercoastal waterway for delivery at our Pensacola and Panama City generating plants.

As you can see from Gulf's dependence on the Warrior-Tombigbee Waterway and the Port of Mobile, we wholeheartedly support the need for adequate funding to properly maintain and improve operations. It is imperative that Gulf continue to receive coal shipments in order to provide continued reliable electric service at the most economical cost to our customers. We are also concerned about the future industrial growth in our service area and must be certain that adequate fuel supplies can be transported to our generating plants.

In summary, we are in full support of the efforts of the Warrior-Tombigbee Development Association to provide efficient and reliable waterway systems for coal delivery. We urge you to approve the Corps' O&M Budget request to provide adequate funds to maintain the Warrior-Tombigbee Waterway and the Mobile Harbor. In fact, we would urge you to approve more than the proposed $11.9 million which will only provide bare

B Parsons Jr

Congressman Bevill
March 27, 1986
Page Two

bones operation tasks. Also, the $10.5 million funding to initiate construction for the replacement of Oliver Lock is a very important part of the Corps' budget request and must be approved.

We feel that it is not only in Gulf Power's interest to support this worthy endeavor, but also in the best interest of the customers of our service area and the nation to improve our capabilities to transport coal and other commodities from points of origin to market places via the Warrior-Tombigbee Waterway and the Port of Mobile.

Sincerely,

Earl B. Parsons Jr.

sra

HARBERT INTERNATIONAL, INC.
ONE RIVERCHASE PARKWAY SOUTH

BILL L. HARBERT
PRESIDENT
(205) 987-5541, 5542

P.O. BOX 1297
BIRMINGHAM, ALABAMA 35201
TELEPHONE (205) 987-5500
TELEX 59792 OR 596103
TELECOPIER (205) 987-5568

March 17, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
 for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

The Warrior-Tombigee Waterway is a vital transportation link in the State of Alabama. It provides for the most economical transportation of products of the mines, the iron and steel industry, agriculture, forest and other commodities, most of which is destined to the Port of Mobile for export; thus enhancing the U.S. balance of payments. The Waterway is a vital source of employment for thousands of people engaged in the above industries as well as barge operations and shipyards.

I strongly support the funding for the required improvements, including the replacement of the 48 year old, outmoded Oliver Lock, as well as the funds required for operation and maintenance of the waterway.

The Budget proposal of $11.9 million dollars for operations and maintenance of the Warrior-Tombigbee Waterway is probably sufficient for minimal operations but would not allow for improvements in dredging disposal and reducing shoaling which is critical to the efficiency of navigation and reduction of future maintenance cost.

The $10.5 million dollar proposal in the budget to initiate construction of the New Oliver Lock is a must to continue the Waterway as a viable transportation facility for the future.

A more efficient waterway ensures the continued growth of industry and is conducive to further economic development in an area with one of the higher unemployment rates in the nation.

HARBERT

Page Two
March 17, 1986

I support the testimony to be given by the President of the Warrior-Tombigbee Development Association and hope that the importance of his comments will be well taken by the Appropriations Committee.

Sincerely,

Harbert Corporation

Bill L. Harbert

LPH:kl

Blakeley Island
ESTABLISHED 1895
Phone 432-4606

HARRISON BROTHERS DRY DOCK AND REPAIR YARD, INC.

P. O. Box 1843
MOBILE, ALABAMA

March 10, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
  for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Representative Bevill:

Harrison Brothers Dry Dock and Repair Yard, Inc., has been in continuous operation since 1895, and we depend upon the repair work generated by the inland navigable waterways of Alabama. In the midst of the prolonged depression in our industry, the Warrior-Tombigbee Waterway is vital to our continued survival. We are highly concerned that the 11.9 million Operations & Maintenance budget for FY-87 is inadequate to support the deficiency correction program of the waterway, for example, the improvement of dredging disposal and the reduction of shoaling. In order to reduce future maintenance costs, these deficiency correction programs will need more financial assistance. This will provide a more navigable Warrior-Tombigbee Waterway.

We are encouraged that the 10.5 million needed to initiate the construction of the new Oliver Lock has been proposed, and we heartily encourage this legislation. We would also like to support the Corps of Engineers budget request for the operations and management, as well as the construction funds for the Mobile harbor and the Warrior-Tombigbee Waterway. We encourage your continued work towards the appropriation of these vital funds for our industry.

We would like to emphasize that the funds for our industry will continue to provide our industry with navigable waterways and viable facilities for the fuel-efficient, safe transport of cargo. We are very appreciative of your past work in this regard, and we look forward to a favorable outcome in these matters.

Sincerely,

William H. Harrison, III

William H. Harrison, III
President
jf

HUNT
OIL COMPANY

March 19, 1986

Tuscaloosa Refinery

Sanders Ferry Road
P O Drawer 1850
Tuscaloosa Alabama 35403
(205) 756-6675

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Representative Bevill:

As a concerned user of the Warrior-Tombigbee Waterway, I would like to state my reasons for supporting this waterway.

Hunt Oil Company is a refinery that produces such products as all grades of gasoline, several types of asphalts, fuel oils and coke. We receive approximately 21,000 tons of crude oil per month and approximately 20,000 of vacuum bottoms by barge. We, in turn, barge out approximately 20,000 tons of crackerfeed a month. The above tonnage represents millions of dollars in revenue. Our dock facilities, which were first built in 1946, are located on the Black Warrior River, near the Oliver Lock and Dam. We have an expansion in the scope for the Hunt Oil Company, thus producing more products that will need to be barged out or more barged in.As a matter of fact, we have now completed an asphalt loading line that is being utilized for the first time.

One crucial reason for us needing the waterway is that we make a product called "crackerfeed" named so because it is used in catalytic crackers. The only way we have of delivering this product is by the waterways. Fortunately, the refineries that we ship to are all over the intercoastal waterway.

With the opening of the Tennessee-Tombigbee Waterway, we anticipate the market in the North to open. We already have prospects to move an additional 100,000 tons/year to the Northern U.S. This gives us an optimistic view of other job possibilities.

We also receive crude oil from international freighters; first off-loaded in Mobile into storage tanks, and then barged to our refinery.

Let me also state that with us having so much barge traffic, it is very important that monies are needed for dredging operations to continue so we can maintain proper draft limits for traffic to move in an economical manner.

So you can gather how important our waterways are, due to lower costs and energy efficiency, in the operation of our refinery. We express deep concern over any delay or non-approval of these much needed funds. I am,

Very truly yours,

HUNT OIL COMPANY

J C Law

J. C. Law
Representative
Crude Oil Supply and
Barge Operations
Southeastern Region

JCL:dd

INTERNATIONAL PAPER COMPANY

LAND AND TIMBER GROUP

P. O. Box 400
Monroeville, Alabama 36461
March 10, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

International Paper Company, as a longtime user of the Warrior-Tombigbee Waterway and member of the Warrior-Tombigbee Development Association, is vitally concerned and interested in the continued maintenance and improvement of subject waterway.

International Paper Company has one of its largest primary mills in the Mobile area which is influenced a great degree on the abundant timber supply accessible by water. We currently are operating a fleet of one 1600 HP tow boat and a fleet of 34 deck and hopper barges on this waterway.

Our Company has just completed a modernization program at our Mobile Mill and some of the justification for this expansion was the moving of significant tonnage of hardwood pulpwood from this waterway.

We urge you to adequately fund the budget request of the Corps of Engineers for the fiscal year 1987 which would be sufficient for operation and maintenance of the waterway.

Our Company recommends to you and the Subcommittee on Appropriations for Energy and Water Development the testimony presented to you through the representatives of the Warrior-Tombigbee Development Association.

Sincerely,

Bobby C. Webb

Bobby C. Webb
Manager-Logging & Fiber Supply
Marine Operations

BCW/ms

Jasper Area
Chamber Of Commerce

PHONE: 205-384-4571 · P. O. BOX 972 · JASPER, ALABAMA 35501

March 20, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
For Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

The Jasper Area Chamber of Commerce by unanimous vote of its Board of Directors in regular meeting assembled on February 27, 1986 expressed its support for the Warrior-Tombigbee Project as follows:

The Warrior-Tombigbee Waterway and the Port Of Mobile are important to the shipment of coal and further future economic development in Walker County.

Construction of the new Oliver Lock is specifically important to this use. We therefore support the $ 10.5 million to initiate this project.

While we support the Corps' of Engineers budget request we feel additional funds should be made available to assure adequate work continue all along the Waterway and Mobile Harbor.

Thank you.

Sincerely,

Joe A. McCluney

Joe A. McCluney
Executive Vice President

JAMc/kle

Mississippi Power Company
2992 West Beach Boulevard
Post Office Box 4079
Gulfport, Mississippi 395
Telephone 601 864-1211

Alan R. Barton
President

the southern electric system

March 20, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for Energy
and Water Development
House of Representatives
Washington, DC 20515

Dear Representative Bevill:

Colonel Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association, is appearing before your Subcommittee in support of the Waterway and the Corps of Engineers' budget request relating to the project. As President of Mississippi Power Company, a user of the Waterway, I am writing in support of Colonel Nichols's testimony. I am also requesting consideration be given to increasing the proposed funding level to ensure both an adequate operation and maintenance program, and continuation of the channel improvement work for the BWT.

The cost of fuel is the single largest operating expense Mississippi Power Company faces. Coal mined in the region served by the Warrior-Tombigbee Waterway provides us with a reliable, competitive source of fuel. Any deterioration of the reliability of shipping along the Waterway would force the Company to higher cost suppliers. The Warrior-Tombigbee Waterway has played an important role since 1976 in the delivery of coal to Mississippi Power Company's facilities. In 1985, approximately 949,000 tons, or 31 percent, of our coal purchases were shipped over this Waterway.

Mississippi Power Company operates in Southeast Mississippi and provides electric service to over 171,000 customers. Our customers include several military installations, federal government agencies and prime defense contractors.

Any deterioration in the ability to ship over this waterway, or an increase in our cost due to increased delays, would not only adversely affect all of these customers including federal installations, but would also impede future economic development in Southeast Mississippi.

Your favorable consideration of the testimony on behalf of the Warrior-Tombigbee Development Association will be greatly appreciated.

Sincerely,

Alan

ARB/kk

March 19, 1986

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for Energy and Water Development
House of Representatives
Washington, D. C. 20515

SUBJECT: Warrior-Tombigbee Waterway

Dear Congressman Bevill:

This statement is presented on behalf of the 3500 business members of the Mobile Area Chamber of Commerce in the support of the continued development of the Warrior-Tombigbee Waterway system.

The port of Mobile, one of the top 12 ports in the nation based on tonnage handled (export/import) is depended upon the extensive waterway system. These waterways, including the Warrior-Tombigbee system play a vital role in the movement of both domestic and international commerce. Over the years as the records will confirm the Warrior-Tombigbee System has grown annually in the amount of tonnage handled, primarily bulk materials, including but not limited to coal, ores, petroleum products and other materials. The export of some of these commodities has assisted greatly in our balance of payments which continues to be a growing problem for our nation.

Based upon the vital role of this major waterway system, we respectfully submit that the Operation and Maintenance Budget for FY 1987 is insufficient for the proper development of the waterway and request that consideration be given by your committee to increasing the funding to meet the Corps of Engineers capability on this project.

We further respectfully request that this Statement be incorporated and made part of the record.

Sincerely yours,

M. B. Rambeau, Director
Trade & Transportation Division
Economic & Development Department

MBR:lla

Mobile Area Chamber of Commerce
P.O. Box 2187, Mobile, Alabama 36652-9986, 205/433-6951

PARKER TOWING COMPANY, INC.
P. O. BOX 72 • TUSCALOOSA, ALABAMA 35402 • 205-349-1677

April 14, 1986

Honorable Tom Bevill, Chairman
Subcommittee on Appropriations for Energy
and Water Development
House of Representatives
Washington, DC 20515

Dear Representative Bevill:

My name is Tim Parker, Jr., and I am Executive Vice-President of Parker Towing Company, Inc. I wholeheartedly endorse and support the testimony of Colonel Offa Nichols. President of the Warrior-Tombigbee Development Association. I join with him and other members of the Warrior-Tombigbee Development Association in efforts to improve the efficiency and reliability of the Warrior-Tombigbee Waterway.

Parker Towing Company operates a fleet of one hundred fifteen (115) hopper barges, thirteen (13) towboats and four (4) tank barges. We have been providing barge transportation service to shippers on the Warrior-Tombigbee Waterway for fifty (50) years.

The Warrior-Tombigbee Waterway and Port of Mobile are not only important to my Company and industry, but it is a vital part of the economic well being of Alabama. Most of the coal exported from Alabama, through the Port of Mobile, moves to Mobile via the Warrior-Tombigbee Waterway. Agricultural products also move in considerable volume via the Warrior-Tombigbee for export. On almost any given day, you will find a wide variety of items being shipped by barge including not only coal and agricultural commodities, but also forest products, iron and steel articles, petroleum and chemical products, paper products and cement, just to name a few. This broad spectrum of products shipped on the Warrior-Tombigbee Waterway clearly indicates the widespread economic impact that this waterway has on business in Alabama.

As a member of the Warrior-Tombigbee Development Association, I support the U. S. Army Corps of Engineer's Operations and

Maintenance (O & M) budget request, but I respectfully request that additional funds should be made available to insure both an adequate O & M program as well as the continuation of the ongoing deficiency correction program. Sufficient funding for O & M and deficiency correction will lead to continued competitive barge transportation costs for Alabama shippers. Anything that we can do to make these shippers more competitive will lead to increased activity by our area's industry and to increased employment.

In closing, let me reiterate that the operation of the Warrior-Tombigbee Waterway is of great importance to not only myself and my firm, but to the people of our region.

Sincerely,

Tim Parker, Jr

Tim Parker, Jr.

TPJ/nd

Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202
Telephone 205 870 6606

David M. Ratcliffe
Vice President

the southern electric system

March 20, 1986

Honorable Tom Bevill, Chairman
House Subcommittee On Appropriations
For Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

Southern Company Services, Inc., on behalf of Alabama Power Company, Gulf Power Company and Mississippi Power Company supports the Warrior-Tombigbee Development Association and its' President in their efforts before your committee. The Southern electric system continuously uses the Warrior-Tombigbee Waterway to deliver coal to system plants and therefore, the condition of the waterway affects the economy of our service area.

Alabama Power Company, Gulf Power Company and Mississippi Power Company join with the Warrior-Tombigbee Development Association in an effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway because of the economics of water transportation and the importance of the Warrior-Tombigbee Waterway to local, national and international trade.

For the past twenty-two years these three utilities have used the Warrior-Tombigbee to transport coal to their respective electrical generating plants at Demopolis, Alabama; Mobile, Alabama; Pensacola, Florida; Panama City, Florida; and Biloxi, Mississippi. In 1985 more than 6.1 million tons of coal was transported from points along the Warrior-Tombigbee Waterway for these three electrical utilities. In 1986 system plants will be receiving tonnage off the Tennessee-Tombigbee Waterway that would have previously gone down the Mississippi River through New Orleans, but with the opening of the Tennessee-Tombigbee Waterway last year the barges will be moving onto the Warrior-Tombigbee River system and through Mobile. Gulf Power Company has also used the Port of Mobile to receive an average of 750,000 tons of coal per year since 1977.

Because of the economic advantage of water transportation over other modes of transportation; the 1,250,000 customers of these three electrical utilities will be directly affected by expenditures for maintenance and upgrading of the Warrior-Tombigbee Waterway, which will improve the waterway's efficiency and reliability. Higher costs through inefficiency or unreliability of the Warrior-Tombigbee Waterway will have a direct and adverse effect upon our customers.

It is for these reasons that a program of constant maintenance and upgrading of the Warrior-Tombigbee Waterway channels and locks is not only necessary but imperative. We support the Corp's budget request for O&M for the Warrior-Tombigbee and Mobile Harbor, but in addition, would like to see more funds made available to ensure both an adequate O&M program and continued channel improvement work.

Sincerely,

lh

SouthTrust Bank
of Alabama, N.A.
[illegible]

SouthTrust Bank

Julian W. Banton
[illegible]

March 13, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Respresentatives
Washington, D.C. 20515

Dear Chairman Bevill:

I am writing to express SouthTrust Bank's strong support for the full operation of the Warrior-Tombigbee Waterway and the related port facility in Mobile, Alabama. Our entire state — including many of SouthTrust's customers — will benefit from the operation and improved efficiency of this vital transportation system.

In the long run, the ongoing viability of the Warrior-Tombigbee System will be a major contributor in the states effort to attract new industry to Central and West Alabama, while at the same time it will help existing companies to compete in world markets. In this connection, we have recently been involved in the formation of a lumber-based marketing cooperative which will utilize the waterway in routing product to export markets, and the improved logistics and projected transportation savings are integral to the co-op's profitability and success.

Specifically, we would like to endorse the proposed funding levels as the minimums necessary for operations, maintenance, and construction. Although $11.9 million for O & M will not permit the continuation of the on-going deficiency correction program, it will allow for minimum operation. The $10.5 million for construction is essential to begin work on a new Oliver lock, removing a dangerous and costly bottleneck.

In closing, let me reiterate our support of Offa Nichols in his testimony to you on behalf of the Warrior-Tombigbee Development Association.

Sincerely,

Julian W. Banton

Julian W. Banton

jmh

Tom Soya Grain Company
RT. 2, BOX 227-L
WEST POINT, MS 39773
PHONE 601-494-3754

March 11, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Deveopment
House of Representatives
Washington, D.C. 20515

Dear Representative Bevill:

We began shipping soybeans and wheat on the Tenn-Tom in the spring of 1979. We were the first to take advantage of the opportunity to ship by water out of East Mississippi.

In the last (7) seven years we have moved approximately four hundred seventy-five (475) barge loads of grain out of our elevators at Aliceville, Alabama and West Point, Mississippi. We are also moving approximately forty-eight (48) barges per year of bentonite south to Mobile. In addition, we have moved fertilizer, gypsum rock, and salt north to Columbus, Mississippi. We are now moving sixty (60) barge loads of salt per year north to Columbus, Mississippi. The completion of the waterway has brought numerous inquiries in regard to the movement of other commodities. We will soon be bringing slagg rock south to serve the county in which we operate. The future for transportation on the Tenn-Tom is unlimited.

We strongly support Mr. Offa S. Nichols, Jr., President of Warrior-Tombigbee Development Association in his efforts to improve the efficiency and reliability of the Warrior-Tombigbee Waterway. We also support the Corps' budget request for O & M funds so that efficiency will not be impaired and planning for the future can be continued.

Respectfully yours,

Raymond D. Lucas, Vice President
TOM SOYA GRAIN COMPANY

RDL/vh

TTT

POST OFFICE BOX 2826
11 GOVERNMENT STREET
MOBILE, ALABAMA 36652
TELEPHONE (205) 433-7800

March 7, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

As a member and director of the Warrior-Tombigbee Development Association, as well as a regular user of the Warrior-Tombigbee Waterway, we wholeheartedly support the testimony given by the President of the Warrior-Tombigbee Development Association, Offa S. Nichols, Jr.

With the opening of the new Tenn-Tom Waterway this past year connecting the Warrior-Tombigbee and the Port of Mobile, with over 16,000 miles of navigable waterways throughout the United States the importance and necessity of maintaining the Warrior-Tombigbee cannot be overemphasized.

In order for the Warrior-Tombigbee and the Port of Mobile to continue to have an efficient and reliable navigation channel the Corps of Engineers must have more funds than the $11.9 million proposed for FY87. This amount will not allow the continuation of the on-going deficiency correction program and could only increase the future maintenance cost.

The approval of the Corps request for $10.5 million to initiate construction of the new Oliver Lock is critical to the timely and efficient contract placement to remove this dangerous and costly bottleneck.

We presently utilize the entire length of the Warrior-Tombigbee and work daily in and around the Port of Mobile. Without the constant operations and maintenance performed by the U. S. Corps of Engineers, it would not be possible for the barge traffic industry to continue to grow and provide this country with the most economical and energy efficient mode of transportation available today.

We appreciate the opportunity of expressing our views on the Warrior-Tombigbee Waterway System and the Port of Mobile and want to thank you for your cooperation in the past and continued interest for the future of all waterways in our nation.

Yours very truly

R A Guthans

R. A. Guthans
President

RAG/mmc

United
States
Steel
Corporation

R.W. RAYBUCK
GENERAL MANAGER

FAIRFIELD WORKS
P. O. BOX [illegible]
FAIRFIELD, ALABAMA 35064

March 20, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriation
  for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

I would like to express my support of the Warrior-Tombigbee Development Association's efforts to assist the Corp of Engineers in obtaining sufficient funds to maintain and improve this essential waterway. United States Steel relies heavily on the Warrior-Tombigbee Waterway Systems as a means for transporting raw materials and finished steel products as well as export of coil through the Port of Mobile.

Our Corporation's decision to make recent large investments in this geographic location was influenced by the availability of reliable water transport. Current forecasts indicate that United States Steel will rely on the Warrior Tombigbee Waterway for the movement of approximately 3.8 million tons per year.

We hope that you will provide the necessary support for maintenance and continuing development of this vital river system.

Very truly yours,

R W Raybuck

General Manager

DAVID VOLKERT
& ASSOCIATES, INC.
ENGINEERS
ARCHITECTS
PLANNERS
P.O. Box 7434, Mobile, AL 36607
(205) 342-1070

March 11, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Representative Bevill:

David Volkert & Associates, Inc. is one of the largest design engineering/architectural planning firms in the State of Alabama, and we wish to make known our support of the Warrior-Tombigbee project and the efforts extended by the Warrior-Tombigbee Association to restore funding to adequate levels.

With Alabama offices located in Mobile and Birmingham, David Volkert & Associates, Inc. is aware of the importance of the Warrior-Tombigbee Waterway, not only to our company which employs over 200 people, but to our state and nation as a whole. Since Mobile's largest industry is its port, the further development of this Waterway would not only add to Mobile's commerce and industry, fueling monies into its economy and providing needed jobs for its people, but would also improve the efficiency and reliability of the Warrior-Tombigbee Waterway and the Port of Mobile. This improved capability and reliability would allow for lower operating costs, higher energy efficiency, and added importance to local, national and international trade. With the shipments of coal, iron ore, farm products, and related products expected to triple in the future, the Warrior-Tombigbee is increasingly important to maintain the serviceability of our waterway system.

Confidence in the Waterway and its efficiency and modernization are important in bringing new industry to this area. Farmers in 21 counties in Alabama ship their grain to Mobile on this Waterway for export. To the Mobile area, with unemployment still ranking among the highest in the nation and with basic industry still struggling to become competitive and back on its feet, the modernization of the Waterway is essential. Lower operating costs to users of the Waterway and Port are essential to obtain a reasonable balance of the international export market allowing the U.S. to reduce our trade deficit. Increases in shipping and commerce result in opportunities for many companies, similar to DV&A, to obtain business and offer meaningful employment to citizens of the State of Alabama and other parts of the country.

Although we support the Corps of Engineers' budget request for the Warrior-Tombigbee and Mobile Harbor for O&M and planning funds, we feel additional funds should be made available in order to allow for continuation of channel improvements already underay, which are designed to reduce future costs.

We appreciate this opportunity to express to you our support of Col. Nichols, President of Warrior-Tombigbee Development Association, and the testimony to be given by him before the Appropriations Committees of the Senate and House. We are proud to join in the collective effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway and the Port of Mobile.

Yours very truly,

DAVID VOLKERT & ASSOCIATES, INC.

T Keith King

T. Keith King
President and
Chief Executive Officer

/sam

Vulcan Materials Company

SOUTHERN DIVISION / P. O. BOX 7324-A • BIRMINGHAM, ALABAMA 35253 • TELEPHONE 205 877-3703

March 27, 1986

DON L. HARRELL, JR.
MANAGER SALES ADMINISTRATION

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

We support the testimony of the Warrior-Tombigbee Development Association. We are part of the collective effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway and the Port of Mobile. Our plans for the future include the possible use of the Waterway to ship crushed stone to the Gulf Coast to be used by the construction industry in concrete, asphalt, and road bases. The crushed stone will replace the rapidly depleting gravel, clam, and reef shells with a superior construction material. The upgrading of the Waterway will not only benefit an area with unemployment still among the highest in the nation, but will better utilize the lower cost, energy efficient barge transportation.

We support the Corps' budget request for Operations and Maintenance for the Warrior-Tombigbee and Mobile Harbor, but we feel that additional funds should be made available to ensure both an adequate O & M Program as well as a channel rehabilitation program. Funds should also be made available to initiate the construction for the replacement of the Oliver Lock which will be an investment in the future of our nation and region, as well as Alabama.

Sincerely,

Don L. Harrell Jr

/li

Jim Walter resources, inc.
MINING DIVISION • BROOKWOOD, ALABAMA

William Carr
President

March 3, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Tom:

I would like to thank you for the opportunity to make a statement to your Subcommittee. Please accept this letter as my statement.

The Mining Division of Jim Walter Resources, Inc. mines approximately 10 million clean tons of coal per year. Of the amount, nearly 75% of our production is exported. Approximately half of our export production travels down the Warrior River and all our export production goes through the Port of Mobile. Our payroll for 3000 plus employees last year was in excess of $100,000,000 and taxes withheld and/or paid were in excess of $50,000,000. It is obvious from these facts and figures that this Company relies heavily on our waterways and port facilities and that they are of the utmost importance to this Company, its employees and the economy of the State of Alabama.

Consequently, I urge you to consider increasing the proposed appropriation for Warrior-Tombigbee Waterway, Port of Mobile operations and maintenance. The amount currently proposed is inadequate and the job cannot and will not be done on this appropriation. An appropriation at this level threatens both the efficiency and reliability of our waterways.

The world coal business is at its most competitive level in history. News of any problems, especially transportation and delivery problems, is quickly spread by other coal producers around the world to the buyers to discourage purchases here. A blemish on our delivery record can have devastating, long term effects from which we might never fully recover. Buyers lost today may never return tomorrow.

For these reasons, I support the Corps' of Engineers budget request. Our waterways and port facilities provide economic prosperity to Alabama that is worthy of your support. Further, I support the statements and testimony to be given by Mr. Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association. I believe that the value of improved efficiency and reliability of the Warrior-Tombigbee Waterway and Port of Mobile cannot and must not be underestimated.

P.O. Box C-79 • Birmingham, Alabama 35283 • Telephone (205) 556-6000

Again, thank you for this opportunity to give my comments on this very important matter.

Yours very truly,

WC/bl

WARRIOR & GULF NAVIGATION COMPANY
P.O. BOX 887
CHICKASAW, ALABAMA 36611

April 14, 1986

N.J. BARCHIE, JR.
PRESIDENT

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

I am Nicholas J. Barchie, Jr., President of Warrior & Gulf Navigation Company. Our company is a member of the Warrior-Tombigbee Development Association and thereby supports the testimony to be presented by Mr. Offa Nichols as President of the Association. In the following paragraphs, we wish to address the utmost importance the Warrior-Tombigbee Waterway and the Port of Mobile means to our company.

Warrior & Gulf Navigation joins in a collective effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway due to lower costs, energy efficiency, and the major importance it has on domestic and international trade; e.g. low transportation costs via water is imperative to the coal producers, steel producers; farmers and paper companies in Alabama to maintain competitive prices in the world market in the movement of their coal, grain, steel and forest products.

Warrior & Gulf is a barge line located in Chickasaw, Alabama and owns 27 towboats and 310 barges making us one of the larger water carriers operating on the BWT system. With our current equipment ownership our annual capacity is approximately 10,000,000 tons. Additionally, we operate a coal handling and iron ore facility and one barge drydock at Port Birmingham; one barge drydock and one boat drydock at our Chickasaw facilities; and, a wholly owned subsidiary of Warrior & Gulf, Mobile River Terminal, is another bulk terminal handling various cargoes from and to ocean-going vessels in the Port of Mobile. Our total employment is 350 people.

Warrior & Gulf provides barge transportation on the BWT System for coal (domestic and export), iron ore, iron and steel products (export, import and domestic), scrap, gypsum and many other types of bulk commodities. With the recent opening of the new pipe mill and the start-up of the large blast furnace at Fairfield, Alabama during 1985, along with projected increases in coal consumption during the next few years we contemplate increases to materialize in our steel, iron ore and coal shipments; thereby, requiring an efficient and properly maintained waterway more important than ever to WGN and the Port of Mobile in our efforts to accommodate the increased demand.

Warrior & Gulf began using the Warrior-Tombigbee Waterway in 1940. During 1982, our capital investment for new equipment approximated $20,000,000 and in 1985 another $2,000,000 in order for our company to continue providing economic water transportation to its customers on this waterway.

The primary limitations encountered in operating the Warrior-Tombigbee System continue to be Oliver Lock and shoaling along this waterway. The mere fact that Oliver Lock was constructed prior to World War II makes it very unreliable and inefficient to handle our six and eight barge tows. With the severely depressed business levels being experienced in the waterway industry, Warrior & Gulf has recently had to increase its tow sizes from six (6) barge to eight (8) barges as a steady diet on this waterway with Oliver Lock being the only lock remaining that cannot accommodate our eight (8) barge tows, thus requiring us to make a double locking. Our delay time often runs 12 to 18 hours or more awaiting our turn to lock through at Oliver Lock with the projected increases in tonnage on the Warrior-Tombigbee System in the foreseeable future this impediment and our delay time will increase more as this lock becomes further saturated. Moreover, the budget proposes $10.5 million to initiate construction of the new Oliver Lock. Approval of this amount is critical to the timely and efficient contract placement to remove this dangerous and costly bottleneck.

Historically, our shoaling problem varies greatly from season to season dependent upon the length of our high water season (December - April) and the amount of flooding that occurs, e.g. during the season where the river stages run 60 feet or more for prolonged periods causes the shoaling to become more severe. Accordingly, the proposed amount for the Warrior-Tombigbee System's Operations & Maintenance is $11.9 million. At best, this will probably support the bare bones operations tasks; however, it does not allow for the continuation of the on-going deficiency correction program. For example, actions that have been underway for several years to improve dredging disposal and reduce shoaling would have to be discontinued or terminated. Continuation of these programs are very critical to the efficiency and reliability of the navigation channel and to the reduction of future maintenance costs. Simply stated, we need the "additional capability" funding.

In closing, we wish to confirm our support for the Corps' budget request for O&M and construction funds for the Black Warrior-Tombigbee System and Mobile Harbor; however, we strongly feel additional funds should be made available to ensure both an adequate O&M program and continuation of the channel improvement work on the BWT.

Honorable Tom Bevill
April 14, 1986
Page 3

We respectfully request your continued support and assistance as your subcommittee considers appropriation of funds for these very important issues concerning the Black Warrior-Tombigbee System and Mobile Harbor.

Very truly yours,

Nicholas J Barchie Jr

Nicholas J. Barchie, Jr.
President

dej

SCOTT

P. O. Box 899
Saraland, AL 36571

April 3, 1986

Mr. Offa S. Nichols, President
Warrior-Tombigbee Development Association
Commerce Center
P. O. Box 10127
Birmingham, AL 35202

Dear Mr. Nichols:

Scott Paper Company appreciates the opportunity to submit a statement on our use of the Warrior-Tombigbee Rivers system. Water transportation of raw materials is of great importance to our company and will be even more so in the future. Decisions of this Committee will therefore be very important to our company's future operation, profitability, and employee work force. Failure to provide for dredging and other projects on the Warrior-Tombigbee Rivers system could increase our company's operating costs to the detriment of the economy of Alabama and its citizens.

Scott Paper Company in Alabama manufactures lumber, pulp and a wide variety of paper products which are shipped to markets throughout the United States. The payroll for our 4,000 employees in the Mobile, Alabama, area is $110 million annually. Scott's operation in the Mobile area contributes over $1 million per day to the economy through payroll, taxes, and purchase of pulpwood and supplies.

Water transportation is used in Scott's Alabama operation to move raw material - pulpwood and logs - to manufacturing plants.

We have used water transportation of wood raw materials on the Warrior-Tombigbee Rivers system for a number of years and are currently upgrading and enlarging our water transportation capabilities. Our $70 million dollar investment in 1982-83 has resulted in lower operating costs which, in turn, has improved the competitiveness of our Alabama operations. We are currently barging approximately 1,400,000 tons of wood on the Warrior-Tombigbee Rivers system to our Mobile, Alabama, manufacturing plants. The $70 million investment included modernization of our Hooks Lake Bargeyard and riverbank woodyards and the Mobile woodyard.

We are continuing to expand our operation and now operate ten towboats and sixty-four barges. Fifty percent of our raw material is being delivered on the Warrior-Tombigbee Rivers system. Since last year we have opened a new bargeyard at Boligee (Mile 268). We have completed construction of a 2800 horsepower towboat.

With this additional $3.2 million investment in new water transportation facilities, it is obvious that a well-maintained Warrior-Tombigbee Rivers system is critical to our company's future. Failure of the U. S. Army Corps of Engineers to dredge and carry out other projects on the Warrior-Tombigbee Rivers system could result in higher transportation costs and negative economic pressures on the company, the economy of Alabama, and the 4,000 Scott employees.

We urge the Committee to provide adequate funding for the Warrior-Tombigbee Rivers system and Mobile, Alabama, harbor.

Sincerely,

R. A. Burk, Jr.
River Region Manager

RAB:caj

LAPEYROUSE GRAIN CORPORATION

A Cargill Company
3100 Cottage Hill Rd., Box 926
Mobile, AL 36601
205/476-3592
Telex 505-518
TWX 810-741-3523

April 7, 1986

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Honorable Bevill:

Lapeyrouse Grain Corporation is a regional grain company operating in the states of Mississippi, Kentucky, Alabama, Georgia and Florida. We have twenty active, operating facilities that receive agricultural commodities grown by area producers in these states. Ten of our facilities are located on the southeastern inland waterway system and ship virtually all of the commodities by waterborne transportation. These water shipments are generally destined to Mobile for export through the Mobile Public Elevator.

Two of our above mentioned facilities are located on the Warrior-Tombigbee waterway system. A reliable and efficient system is important to them. The economic viability of these locations and the agricultural communities that rely on them benefit from the lowest cost mode of transportation, water, to carry their product to world markets.

We, therefore, support and ask you to support the project and testimony being presented by Mr. Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association.

With regard to the proposed operation and maintenance budget of $11.9 million and $10.5 million for the proposed Oliver Lock and Dam, we support the allocations. It appears, however, that the $11.9 million allocation for O & M is insufficient to even maintain ongoing projects that improve channel efficiency and reduce costs. We would suggest revaluation in this area, and would support an upward revision in the O & M allocation.

Thank you for the opportunity of presenting our company's view, and we hope through support of the above that cost efficient, reliable waterways can be developed and maintained.

Respectfully,

Bruce A Weinard

Bruce A. Weinard
President

BAW:yb

STATEMENT OF Richard Shelby
U.S. REP. RICHARD SHELBY
BEFORE THE
SUBCOMMITTEE ON
ENERGY AND WATER DEVELOPMENT
APRIL 14, 1986

MR. CHAIRMAN, I APPRECIATE THE OPPORTUNITY TO EXPRESS MY ONGOING SUPPORT FOR WATERWAY DEVELOPMENT WHICH IS VITAL TO THE FUTURE GROWTH AND PROSPERITY OF THE STATE OF ALABAMA. HOWEVER, FIRST I WOULD LIKE TO EXPRESS MY MOST SINCERE APPRECIATION TO THE CHAIRMAN OF THIS SUBCOMMITTEE, THE HONORABLE TOM BEVILL OF ALABAMA'S FOURTH CONGRESSIONAL DISTRICT, FOR HIS GREAT LEADERSHIP AND DEDICATION TO WATERWAY DEVELOPMENT IN THIS NATION AND IN OUR STATE.

AS A MEMBER OF THE ALABAMA CONGRESSIONAL DELEGATION, I CANNOT EMPHASIZE ENOUGH THE IMPORTANCE OF THIS SUBCOMMITTEE'S ACTION TO OUR STATE. ALABAMA IS BLESSED WITH A VAST NETWORK OF WATER RESOURCES WHICH MUST BE PRUDENTLY DEVELOPED TO REACH OUR FULL POTENTIAL. ONE OF THE MOST BASIC AND EFFICIENT USES OF TAXPAYER MONEY IS ESTABLISHING AN INFRASTRUCTURE WHICH BENEFITS A WIDE RANGE OF INDUSTRY AND THE GENERAL PUBLIC THROUGH INCREASED JOB OPPORTUNITIES AND PUBLIC FINANCIAL RESOURCES. WATERWAY DEVELOPMENT PRODUCES A GOOD RETURN ON OUR TAXPAYER INVESTMENT.

IN ALABAMA, WE HAVE ONLY BEGUN TO SEE THE BENEFITS OF THE RECENTLY OPENED TENNESEE-TOMBIGBEE WATERWAY. COMMERCE HAS GROWN STEADILY EACH MONTH SINCE THE WATERWAY WAS COMPLETED. FOR EXAMPLE, OVER THREE TIMES THE AMOUNT OF COMMODITIES MOVED ON THE WATERWAY THE LAST SIX MONTHS OF 1985 AS THAT TRANSPORTED DURING THE FIRST SIX MONTHS. THE LOW-COST TRANSPORTATION PROVIDED BY THE TENN-TOM HAS GENERATED NEARLY $250 MILLION OF NEW INDUSTRIES AND PLANT EXPANSIONS THUS FAR, CREATING OVER 1100 NEW JOBS.

HOWEVER, THE BUSIEST AND MOST DEVELOPED OF ALABAMA'S NAVIGABLE WATERWAYS, THE WARRIOR-TOMBIGBEE, SUFFERS FROM A SINGLE, OUTDATED LOCK AND DAM WHICH ADDS NEEDLESS RISK AND TIME TO BARGE TRAFFIC. PRIOR TO THE 1970S, THE WARRIOR-TOMBIGBEE WATERWAY HAD OPERATED IN A GENERALLY EFFICIENT AND RELIABLE MANNER, BUT RECENT AND INCREASING DEMANDS BY SHIPPERS OF COAL, AGRICULTURAL AND TIMBER PRODUCTS, STEEL, AND CHEMICALS REQUIRE THAT THE WARRIOR-TOMBIGBEE OPERATE AT PEAK EFFICIENCY ON A FULL-TIME BASIS. THE OPERATIONAL EFFICIENCY IS SERIOUSLY IMPAIRED BY THE BOTTLENECK CAUSED BY ONE REMAINING SUBSTANDARD LOCK -- THE WILLIAM BACON OLIVER LOCK ON THE WARRIOR RIVER. THIS PRE-WORLD WAR II LOCK IS 95x460 FEET AND IS SMALLER THAN THE OTHER FIVE, ALL OF WHICH ARE THE NEW STANDARD SIZE OF 110x600 FEET. THIS NECESSITATES TOWS BEING BROKEN APART AND UTILIZING MULTIPLE LOCKAGES TO GET THROUGH. THIS IS NOT ONLY TIME CONSUMING, BUT IT ALSO ADDS SUBSTANTIAL RISK.

I STRONGLY URGE THE SUBCOMMITTEE TO APPROVE THE $10.5 MILLION REQUEST FOR THE ORDERLY AND TIMELY PLACEMENT OF CONTRACTS AND THE ACCOMPANYING WORK TO REPLACE THIS ONE REMAINING SUBSTANDARD LOCK ON THE WARRIOR-TOMBIGBEE SYSTEM.

THE CORPS OF ENGINEERS HAS ALSO REQUESTED $11,948,000 FOR OPERATIONS AND MAINTENANCE OF THE WARRIOR-TOMBIGBEE WATERWAY AND HAS STATED ITS NEED FOR ADDITIONAL CAPABILITY OF $4,232,000 FOR AN ONGOING PROGRAM TO CORRECT LONG-STANDING DEFICIENCIES. ORDERLY CONTINUATION OF THIS ITEM IS ESSENTIAL TO ENSURE THE EFFICIENCY AND RELIABILITY OF THE WATERWAY AND WILL SURELY REDUCE FUTURE MAINTENANCE COSTS.

ANOTHER KEY ASPECT OF ALABAMA'S WATERWAY DEVELOPMENT IS THE EFFICIENT OPERATION OF OUR SOUTHERN PORT WHICH OPENS INTO THE GULF OF MEXICO AT MOBILE HARBOR. I UNDERSTAND THAT $15 MILLION IS INCLUDED IN THE BUDGET REQUEST FOR THE DEEPENING OF THIS CHANNEL WHICH IS CRUCIAL FOR THE FULL UTILIZATION OF ALABAMA'S INLAND WATERWAY NETWORK AND FOR THE NAVY'S PLANNED HOMEPORTING.

The subcommittee will also hear testimony today from representatives of the Coosa-Alabama River Improvement Association. Funds are included in the budget for several projects, including the Alabama-Coosa River project. The consistent reliability of the nine foot channel during dry seasons is essential for industry to recognize the advantages of river transportation from Montgomery to Mobile. The budget request of $4,924,000 is less than half needed to complete the project during fiscal year 1987.

Finally, I want to express my support for the efforts of the Tri-Rivers Waterway Development Association on behalf of the Appalachacola-Chattahoochee-Flint Waterway and for its maintenance budget item of $4.5 million.

Mr. Chairman, I appreciate the opportunity to express my views to this committee and urge favorable consideration of the requests made for the development of Alabama's waterways. The efficient and reliable transportation of freight on inland and intracoastal waterways is of substantial and growing importance to our economy. Just since the end of World War II, the volume of freight transportation on shallow-draft waterways has tripled and now totals some 300 billion ton-miles of commerce annually. We must continue our efforts to develop the fullest potential of this abundant and clean natural resource.

Thank you, Mr. Chairman.

HEARING SPEECH

SENATOR HOWELL HEFLIN

FUNDS FOR THE TENNESSEE-TOMBIGBEE WATERWAY

APRIL 14, 1986

MR. CHAIRMAN, I CONTINUE TO STAND FIRM IN MY CONVICTION THAT NO PROJECT HOLDS SO MUCH PROMISE FOR THE PEOPLE OF ALABAMA AND OUR NATION AS DOES THE TENNESSEE-TOMBIGBEE WATERWAY. I HAVE BEEN PROUD TO STAND WITH OTHER SUPPORTERS OF THE WATERWAY IN THE FIGHT TO MAKE THE PROJECT A REALITY.

THE RESULTS OF A RECENT STUDY CONDUCTED BY THE ARMY CORPS OF ENGINEERS, INDICATE POTENTIAL SHIPMENTS ON THE WATERWAY TO BE 14.5 MILLION TONS DURING FISCAL YEAR 1986, THE FIRST FULL YEAR OF OPERATION. THIS ESTIMATE OF TONNAGE REFLECTS CURRENT ECONOMIC CONDITIONS INCLUDING A GREATLY DEPRESSED EXPORT COAL MARKET AND SLUMPS IN WATERWAY USE NATIONWIDE. IN ADDITION TO THESE ECONOMIC FACTORS, THE 18 MONTH EARLY OPENING FOUND SHIPPERS, IN MANY INSTANCES, NOT FULLY PREPARED TO USE THE WATERWAY FOR CONTRACTUAL AND OTHER REASONS.

MR. CHAIRMAN, I AM SURE YOU WILL RECALL THAT TRAFFIC ON THE MCCLELLAN-KERR WATERWAY WHICH OPENED IN THE EARLY 1970'S, ALSO GOT OFF TO A SLOWER START THAN EXPECTED. HOWEVER, AS SHIPPERS BEGAN ADJUSTING TO THAT NEW WATERWAY, TONNAGES BEGAN INCREASING DRAMATICALLY, AND WITHIN A FEW

YEARS EXCEEDED PREVIOUS ESTIMATES. I HAVE EVERY REASON TO BELIEVE THAT THAT THE TENN-TOM EXPERIENCE WILL BE JUST AS ENCOURAGING.

FOR EXAMPLE, WOOD PRODUCTS ARE BEING SHIPPED ON THE TENN-TOM WHICH WERE NOT ANTICIPATED ONLY A FEW YEARS AGO. ALSO, CHEMICAL SHIPMENTS HAVE BEEN MUCH GREATER THAN EXPECTED.

OTHER WATERWAY RELATED ECONOMIC ACTIVITIES IS OCCURING IN THE TENN-TOM REGION. FIFTEEN PORTS, BOTH PUBLIC AND PRIVATE HAVE BEEN BUILT ALONG THE WATERWAY AND ARE IN OPERATION. SEVERAL MORE PORTS HAVE BEEN ANNOUNCED. I WOULD ALSO STATE THAT RECREATIONAL USAGE ON THE LAKES AND CANALS ALONG THE TENN-TOM HAVE BEEN VERY HEAVY AND IS STEADILY INCREASING. THE WATERWAY IS EXPECTED TO ATTRACT ABOUT $4 MILLION VISITORS IN THIS FISCAL YEAR.

MR. CHAIRMAN, I URGE THE COMMITTEE TO APPROVE THE BUDGET REQUEST FOR THE OPERATION AND MAINTENANCE FUNDS OF THE TENNESSEE-TOMBIGBEE WATERWAY.

THANK YOU, MR. CHAIRMAN.

STATEMENT OF REPRESENTATIVE SONNY CALLAHAN
FIRST CONGRESSIONAL DISTRICT OF ALABAMA
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS

APRIL 14, 1986

TENNESSEE-TOMBIGBEE WATERWAY

Mr. Chairman, it is an honor to come before you to add my enthusiastic support to the Tennessee-Tombigbee Waterway funding request for fiscal year 1987.

Construction of the Tenn-Tom is now complete and traffic is moving on the entire system. Some 2 million tons of commerce were transported on the system in its first year and use has grown rapidly from month to month. Competition from the Tenn-Tom has helped to lower rail rates significantly. Low transportation costs have generated nearly $250 million in new industries and created over 1100 new jobs. Some of the major commodities using the Tenn-Tom include coal, agricultural products, metals, petroleum products, and paper products. Shipments of wood products and chemicals have exceeded expectations.

Fifteen ports, both public and private, have been built along the Tenn-Tom and more are in the planning stages. Recreational usage on the waterway's lakes and canal has been very heavy. An estimated 4 million visitors will use these facilities in fiscal year 1986.

We have invested dearly in the project and must assure its adequate maintenance to protect that investment by allowing efficient commodity movement. The operation and maintenance funding level needed in fiscal year 1987 is $19.641 million. I hope the committee will approve this amount.

I appreciate having the chance to appear here today.

MONDAY, APRIL 14, 1986.

APPALACHICOLA-CHATTAHOOCHEE FLINT WATERWAY

WITNESSES

H. BAXTER HARCOURT, PRESIDENT, TRI-RIVERS WATERWAY DEVELOPMENT ASSOCIATION

HOMER B. HIRT, JR., VICE-PRESIDENT, TRI-RIVERS

WILLIAM M. RUSHTON, DIRECTOR, ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

LARRY LEE, EXECUTIVE DIRECTOR, TRI-RIVERS

Mr. BEVILL. Next we have Mr. Larry Lee of the Tri-Rivers Waterway Development Association. Larry, we will be glad to hear from you and your group. You may proceed as you wish.

Mr. LEE. We appreciate the opportunity to come before you today. I am Larry Lee, Executive Director of the Tri-Rivers Waterway Association from Dauphin, Alabama. I have with me Mr. Homer Hirt, who is the Vice President of our association from Sneeds, Florida, he manages a port there, and also Mr. Baxter Harcourt, who is President of our association, is an attorney in Columbus, and at this point I would like to yield to Mr. Harcourt who will make the statement for our association.

Mr. HARCOURT. First of all, Mr. Chairman, I would like to say that I brought my Executive Secretary up here today to testify before this committee. We are delighted to have Larry on the Board.

You know, for many years Andy Summers was the Executive Director of Tri-Rivers and we truly miss her on this trip and she sent word and asked that she be remembered to you and to the members of your committee.

Mr. Chairman, we have a prepared statement which I would submit for the record if I may, sir, but as a side comment, I live in Columbus. I practice law in Columbus and we have a port in Columbus which is operated by the Georgia Port Authority.

Across the river is Phoenix City, as you well know, and there is an Alabama dock facility there. It has been my observation over the years that we are truly one State in the river basin there, Alabama and Georgia and, of course, Florida.

The Tri-River Waterway Association is comprised of membership in Alabama, Georgia and Florida. We are supported by funding from the Alabama legislature, the Georgia legislature, the counties that are members as well a individual membership. So if there has ever been a true community effort to improve the lot of the people who work and live in the entire river basin, this organization has brought that group together and today we are seeing an improvement in the prospects of new industry in the area.

We see a continuation of four-lane highways from Phoenix City to the Florida line, highway 27 in Georgia paralleling the river, is in the process—it is in the planning process of being four lanes. These two four-lane highways will complement the river system.

I would certainly at this time be remiss if I did not invite your attention, Mr. Chairman, and members of this committee, to these figures which are contained in our prepared statement. These figures are based on a study that was paid for by the Tri-River Waterways Association, the Georgia General Assembly and the Georgia Port Authority some two years ago by Booz Allen and Hamilton who I believe is based in Baltimore, Maryland.

Based on the study that they made, and based on the increase of tonnage that we had this year—which totaled 1,237,274 tons of cargo, which is an increase of approximately 200,000 tons over the previous year—these figures are what attracts my attention and I feel would be of interest to you.

These figures represent much more than just tons of fertilizer or grain or fuel oil, but, one, they represent a savings in transportation costs alone of more than $6 million to industry of the region; and, according to economic studies, this commercial traffic also represents 1,350 jobs, $22.5 million in personal income, and $1.95 million in State and local taxes in the ACF basin.

When we think that we have to have a stated number of tons for the maintenance of this system, this is one thing. But when we look at the economic impact that that tonnage is bringing in to the people who would not have those jobs, that the community and States would not have those taxes that are produced by those jobs, then I wonder if we are not fooling ourselves when we say we have to have X number of tons to justify a system.

I think you have to go back and look and see what the economic impact is on the region and on the State and on the surrounding States. When the dollar is generated in Phoenix City, that dollar also comes across the river into Georgia, and vice versa. When a job is created in the States of Alabama, Florida or Georgia, then I suggest, Mr. Myers, that this would also—there would be ripples of it that go up to our sister State of Indiana, and you also will benefit from it.

With those comments, Mr. Chairman, unless you have some comment I would like to ask Mr. Homer Hirt to make a statement on behalf of the State of Florida.

[The statement of Mr. Harcourt follows:]

SUMMARY

TRI-RIVERS WATERWAY DEVELOPMENT ASSOCIATION

REQUEST FOR FY 1987 FUNDING

The Apalachicola-Chattahoochee-Flint Waterway

Operations and Maintenance	$5,907,000
Studies (Continuation of "308"). .	$ 300,000

TRI RIVERS
Waterway Development Association
P.O. Box 2232, Dothan, AL 36302
205/792-8611

Larry Lee
Executive Director

BEFORE THE
HOUSE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE
ON APPROPRIATIONS

STATEMENT IN BEHALF
of the
APALACHICOLA-CHATTAHOOCHEE-FLINT WATERWAY

Communication concerning
this document should be
addressed to:

H. Baxter Harcourt, President
Tri-Rivers Waterway Development
Association
P. O. Box 2232
Dothan, AL 36302

(404) 327-1885 Columbus, GA
(205) 792-8611 Dothan, AL

FILED AT:

Subcommittee Hearing
Washington, D.C.
April 14, 1986

BOARD OF DIRECTORS
ALABAMA: J. Herbert Beasley, *Eufaula*; R. H. McSwean, *Abbeville*; Joseph L. Donofro, *Dothan*; Charles Tigner, *Seale*; E. E. Bishop, Sr., *Dothan*;
GEORGIA: W. W. Miller, *Cusseta*; Walter Bakes, *Ft. Gaines*; J. B. Swicord, *Bainbridge*; David Gambrell, *Albany*; Nancy Kinsey, *Blakely*; Billy Grimsley, *Colquitt*; Alex Kemp, *Camilla*; H. Baxter Harcourt, *Columbus*; Lillian Graddy, *Georgetown*; Bobby Lamb, *Shellman*; Phillip Hornsby, *Iron City*; Ed Cannington, *Lumpkin*; Winston Brock, *Bainbridge*;
FLORIDA: J. P. McDaniel, *Sneads*; Homer B. Hirt, Jr., *Sneads*.

STATEMENT

BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE OF THE HOUSE APPROPRIATIONS COMMITTEE

Washington, D.C.

April 14, 1986

Thank you, Chairman Bevill and members of the subcommittee, for this opportunity to present the needs of the Apalachicola-Chattahoochee-Flint Waterway as we see them.

I am Baxter Harcourt of Columbus, GA, president of the Tri-Rivers Waterway Development Association. Our organization is vitally interested in economic development in Southeast Alabama, Southwest Georgia, and Northwest Florida and for more than 25 years has worked to see that the ACF waterway is used to the benefit of all citizens of this three-state region.

The people of this area are proud and industrious people, and while the region is rich in both natural resources and heritage, frankly Mr. Chairman, we have been bypassed to a certain extent by the growth much of the Sunbelt has experienced.

One of the reasons for this is because of the lack of a good transportation network throughout this region that can serve as a catalyst for industrial development.

Our four-lane highways are limited and we're faced with the abandonment of rail service in many locations.

However, we have a transportation system that many other areas do not. This, of course, is the Apalachicola-Chattahoochee-Flint Waterway System. The ACF is an asset that you and the other members of your committee have championed for many years and we're grateful for your support.

Because of this support, commercial use of the waterway was at an all-time high in 1985 as we shipped 1,237,274 tons of cargo. This was the second straight year we've exceeded one million tons.

But these figures represent much more than just tons of fertilizer or grain or fuel oil. For one, they represent a savings in transportation costs alone of more than $6 million to industry of the region. And accordin to economic studies, this commerical traffic also represents 1,350 jobs, $22.5 million in personal income and $1.95 in state and local taxes in the ACF basin.

So it is clear that maintaining a viable and active waterway is vital to the well-being of our area.

This is especially true for agriculture. The problems besetting farmers and agribusinesses are well-documented. These problems are very real throughout Southeast Alabama, Southwest Georgia and Northwest Florida where agriculture remains our No. 1 industry.

Increasingly, agriculture is realizing how they can benefit from greater use of water transportation both to ship in fertilizers and chemicals and to ship out grains and soybeans. In 1985 our association held workshops in Alabama and Georgia to show agriculture how to take advantage of the waterway.

As you recall, the Corps of Engineers removed rock obstructions from the Apalachicola River in early 1984. Because we obtained a more reliable channel, we projected a substantial increase in tonnage.

These projections have proven correct and today we stand on the threshold of unparalleled growth up and down our waterway. Business at all six ports on the system is at an alltime high and the Alabama State Docks, the Georgia Ports Authority and the Jackson County, Florida Port Authority are all expecting this expansion to continue in 1986.

We are excited about this growth that is vitally needed and long overdue. And the experiences of the last two years tell us now is not the time to pull back our forces.

The Administration's budget for operation and maintenance for our waterway for the next fiscal year is $4,522,000. Yet the Corps of Engineers has a stated "capability" for this system of $5,907,000.

While we fully understand and appreciate the budget restraints the Congress is now coping with, we believe the figures clearly show that dollars devoted to continuing development of the ACF waterway are a sound and worthwhile investment.

Therefore, we strongly urge this committee to fund operations and maintenance of the ACF waterway for the full $5,907,000.

In addition, we wholeheartedly endorse the Administration's recommendation to appropriate $300,000 to the Corps to continue its basinwide "308" study.

Mr. Chairman, you and your fellow committee members have been loyal and faithful friends of our waterway efforts for many years. As a result, you have touched many lives in our region.

Again, we are grateful for this support and for your service to our citizens. We trust that this support will be unwavering.

Thank you.

Mr. **Bevill**. Mr. Hirt.

Mr. **Hirt**. Thank you very much.

Mr. **Bevill**. Your statement will be made part of the record.

Mr. **Hirt**. I have talked to our County Commission Chairman, and he has given us permission to classify Jackson County, Florida as Lower Alabama in honor of Alabama Day. So, we will move the line temporarily.

We operate a port in Jackson County. To back up Mr. Harcourt's figures, we went from 60,000 tons in 1983, and after some rock removal we went to 208,000 tons. We move—probably half the material that is moved on the entire system goes through ports in Florida. We are very proud of that and very proud to be associated with Tri-Rivers, and to come up here and meet with you people.

Mr. **Bevill**. Very good. It is commendable what you have done on this waterway.

Mr. **Harcourt**. Mr. Chairman, just one more thing, if I may. I would like to point out that the coal that is coming out of Illinois down the Tenn-Tom is coming down to the Gulf Intercoastal Waterway and into the Tri-Rivers system, going to Mr. Hirt's port of Sneads, and from there it is going by train, I believe, over to the Florida Electric Company.

Mr. **Hirt**. By truck to Gulf Power, yes.

Mr. **Harcourt**. Our system is now joined with the Tenn-Tom and, in turn, we are joined with the waterways of the world.

Mr. **Bevill**. Sure.

Mr. **Harcourt**. We have barges coming into Bainbridge from Germany. We have shipped out last year 15,000 tons—15,000 acres of Southwest Georgia corn that went to Japan for cash dollars. It wasn't trade; it was cash dollars. And this is just one example of what we have accomplished so far and what we look for in the future.

Mr. **Bevill**. I think it is commendable what you have accomplished there in Southeast Alabama and Southwest Florida and Georgia. Thank you very much.

[The information follows:]

Alabama Department Of Economic And Community Affairs

GEORGE C. WALLACE
GOVERNOR

W.M. "BILL" RUSHTON
DIRECTOR

April 14, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Appropriations for
  Energy and Water Development
United States
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I wish to express my thanks to you for the opportunity to address this Subcommittee along with my fellow Alabamians in support of the Apalachicola-Chattahoochee-Flint (ACF) River system. I want to restate my strong support for continued funding of the full-time operation and maintenance of the Apalachicola-Chattahoochee-Flint Waterway.

The ACF Waterway connects the Alabama ports of Phenix City, Eufaula, and Columbia, in east and southeast Alabama, to the Gulf Intracoastal Waterway and the ports and other inland waterways of our nation. It provides a dependable, safe and cost-effective method of transportation of materials and products, both industrial and agricultural, as well as providing jobs and opportunities for many of Alabama's citizens.

For the second consecutive year, commercial traffic on the ACF exceeded one million tons. Unofficial tonnage for 1985 on the ACF was in excess of $1.2 million tons, an all-time record. Cargos of such commodities as bauxite, fertilizer, fishmeal, grain, feedstock, and molasses moved in over 850 barge loads. But more than that, these cargos represent a savings in transportation costs of over $6 million to the industries of this region. This traffic also represents 1,350 jobs, $22.5 million in personal income and $1.95 million in state and local taxes throughout the ACF basin.

We have supported the continuing work of the 1983 three-state Memorandum of Agreement through the Interim Coordinating Committee which has resulted in the following:

3465 Norman Bridge Road • P.O. Box 2939 • Montgomery, Alabama 36105-0939 • (205) 284-8700

a.) the completion and publication of the Water Assessment for the ACF Basin (1984);

b.) the completion and publication of the Interim Drought Management Plan for the ACF Basin (1985); and

c.) the development of the soon to be completed Navigation Maintenance Plan for the ACF Basin, which should provide guidance for long term maintenance of the waterway.

We also support the Corps of Engineers' request for ongoing funding of the "308" Study for FY 87. It is imperative that this study continue to develop the interstate mechanisms for management of the ACF Basin's resources.

The State of Alabama has substantial public investments in its inland dock facilities along the ACF Waterway. In addition, major private investments are also impacted by the efficiency of the waterway.

In closing, I affirm my support and that of the Alabama Department of Economic and Community Affairs. I would like to thank you and the members of the Subcommittee whose support and assistance over the years has insured that adequate funding was provided for the operation and maintenance of the ACF Waterway.

Sincerely,

Bill Rushton

W. M. "Bill" Rushton
Director

WMR/adt

STATE OF ALABAMA
GOVERNOR'S OFFICE
MONTGOMERY 36130

GEORGE C. WALLACE
GOVERNOR

April 14, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Appropriations for
Energy and Water Development
United States
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

It is a privilege and a pleasure to address this Subcommittee, along with the members of the Tri-Rivers Waterway Development Association, in support of navigation on the Apalachicola-Chattahoochee-Flint (ACF) River system. Specifically, we endorse the request of the Association and its supporters for continued funding of the full-time operation and maintenance of the Apalachicola-Chattahoochee-Flint Waterway.

The ACF Waterway provides a vital link into east and southeast Alabama, connecting the ports of Phenix City, Eufaula, and Columbia, via the Gulf Intracoastal Waterway to the Gulf Port of Mobile and the other waterways of our National Inland Waterway System. It provides a dependable, safe and cost-effective method of transportation of materials and products, both industrial and agricultural, as well as providing jobs and opportunities for many of Alabama's citizens.

For the second straight year, commercial traffic on the ACF exceeded one million tons. Unofficial tonnage for 1985 on the ACF was in excess of $1.2 million tons, an all-time record.

We support the Corps of Engineers' request for FY 87 funding for the "308" study, continuing the work of the 1983 three-state Memorandum of Agreement and Interim Coordinating Committee which has resulted in the following:

a.) the completion and publication of the Water Assessment (1984);

b.) the completion and publication of the Interim Drought Management Plan (1985); and

c.) the development of the soon to be completed Navigation Maintenance Plan.

The ACF Waterway is of vital importance to Alabama and to the entire region. Because of this, I authorized the creation of the Alabama Waterways Development Agency to promote the development and utilization of all Alabama's waterways. In addition, this past year Alabama joined with the states of Florida, Louisiana, Mississippi, and Texas in forming the Gulf States Intracoastal Waterway Coordinating Committee to provide a forum for discussion of the issues and opportunities related to the utilization of the Gulf Intracoastal Waterway.

In closing, I would like to express thanks to you and to all the members of the Subcommittee whose support and assistance over the years has insured that adequate funding was provided for the operation and maintenance of the ACF Waterway.

Sincerely,

George C. Wallace

George C. Wallace

GCW/adt

BEN ERDREICH
6TH DISTRICT, ALABAMA

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AND URBAN AFFAIRS

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Congress of the United States
House of Representatives
Washington, DC 20515

Statement of Rep. Ben Erdreich
Energy and Water Resources Subcommittee
House Appropriations Committee
April 14, 1986
Re: Village Creek Flood Control Project, Birmingham

Chairman Bevill and Subcommittee members, I am grateful for the opportunity to submit a statement for the record of my strong support for funding for the Village Creek flood control project in Birmingham, Alabama.

Village Creek is included in both the House- and Senate-passed authorization bills, and I join all of my colleagues in this room in the hope that the authorization will soon become law. Studies and engineering design for Village Creek have been completed. My constituents would be grateful for action by this Subcommittee to get the work under way.

The project is important to neighborhoods in and surrounding Birmingham to alleviate the damages to homes and businesses and the threats to lives and safety that the flooding causes. In addition, the City of Birmingham needs relief from the flooding of Village Creek in order to complete plans to modernize the Birmingham Municipal Airport. Flooding damage at the airport has become increasingly severe.

Village Creek flooding accounts for over $2 million in damages each year. With the channel modification and evacuation of some residences, the project will provide benefits in excess of costs. I urge this Subcommittee, which has been so helpful with this project, to act again to ensure that the work on Village Creek can go forward.

BEN ERDREICH
6TH DISTRICT, ALABAMA

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Congress of the United States
House of Representatives
Washington, DC 20515

Statement of Rep. Ben Erdreich
Subcommittee on Energy and Water Resources
House Appropriations Subcommittee
April 14, 1986
Re: Valley Creek Flood Control Study, Jefferson County, Alabama

Chairman Bevill, Subcommittee members and colleagues, I am grateful for this opportunity to submit this statement for the record in support of continued funding for the Valley Creek Flood Control studies.

The Corps of Engineers has requested $148,000 for the second phase of study on Valley Creek for FY 87. This is the phase in which cost-sharing needs are determined. It is important that this funding go through so that the communities in the western part of Jefferson County that are affected by the flooding can learn and plan for the commitments required of them.

The Corps has identified what it feels is a feasible project to control the flooding along Valley Creek, but have noted that some technical obstacles need to be overcome. It is important that this project not stall during this important study process. Mr. Chairman, I am grateful for the help you and your Subcommittee have provided the people of Jefferson County and thank you for allowing me to submit these remarks.

MONDAY, APRIL 14, 1986.

RANDLEMAN LAKE, NORTH CAROLINA

WITNESSES

HON. HOWARD COBLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

HON. BILL COBEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

JOHN FORBIS, MAYOR, GREENSBORO, NORTH CAROLINA

DARRELL FRYE, CHAIRMAN, RANDOLPH COUNTY BOARD OF COMMISSIONERS

TOM RHODES, SECRETARY, NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

Mr. BEVILL. Next we have our good friends and colleagues Mr. Howard Coble and Mr. William Cobey. We look forward to hearing from both of you. You may submit your statements, if you have a statement, for the record. We would be glad to hear from you.

Mr. COBLE. Mr. Chairman, at the outset I will be very brief. I want to express my thanks to you and to your Ranking Minority Member, Mr. Myers, for the patience that you all have shown me during the past, I guess, 8 to 10 months; every time I find you on the Floor I get both of you aside. But you have both been patient.

I have not bothered the gentleman from Oklahoma, but——

Mr. BEVILL. I think he talks about us on a lake or something.

Mr. MYERS. Once or twice a day, yes.

Mr. COBLE. But you have been very patient.

We are back before you again requesting funds, and I am pleased to present to you, Mr. Chairman, and members of the committee, the Mayor from the largest city in my district, the Honorable John Forbis, Mayor of Greensboro.

[The statement of Mr. Coble follows:]

STATEMENT OF THE HONORABLE HOWARD COBLE
BEFORE THE HOUSE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
REGARDING THE RANDLEMAN LAKE PROJECT (RANDOLPH COUNTY, NORTH CAROLINA)
April 14, 1986

Mr. Chairman, I want to thank you and your colleagues for granting me this opportunity to testify on behalf of the proposed Randleman Lake project, to be located in Randolph County, North Carolina. I am requesting that the Subcommittee endorse the capability report on Randleman Lake issued by the Corps of Engineers, which calls for $3 million in start-up funds for fiscal year 1987. These funds would primarily be earmarked for land acquisition, road and utility relocations, the creation of an access road, and the construction of other facilities. The Corps of Engineers has already spent $4.1 million for environmental studies, real estate surveys, and other engineering work.

Mr. Chairman, an editorialist from my hometown of Greensboro recently devoted his column to the subject of Randleman Lake. In tongue-and-cheek style, he likened the project to a soap opera. The analogy is somewhat accurate, as five different Congressmen from the Sixth District have tried to obtain funding for the project. We have come close to procuring start-up money, but something always crops up, soap-opera style, usually at the eleventh hour: a veto, an unfavorable assessment by OMB, and so on. Authorized pursuant to the Flood Control Act of 1968 (Public Law 90-483), the project has been studied and debated for almost 50 years. If start-up funds are not obtained this year, it is generally perceived that the project cannot be constructed in time to meet the water demands of the affected region.

You may recall that last year at this time Representative Cobey and I were awaiting the results of a study on the water needs of the Upper Cape Fear River Basin. The study was completed last spring, and I have shared pertinent excerpts of it with the Subcommittee staff. Prepared by the engineering consulting firm CH2M HILL, the report is comprehensive in scope and timely in its release. Of the 40 potential water sources reviewed, the authors selected Randleman Lake as the one which could best meet the needs of the region.

A wealth of data conclusively establishes that the area and its 425,000 residents lack the flood control, recreational, and water supply benefits which Randleman Lake will provide. Specifically:

- o Average annual flood damage along the main stem of the Deep River is estimated at $737,000 over the next 100 years if no flood control facilities are constructed. Randleman Lake will reduce this rate by 53%.

- o Civic leaders in the project area have attempted for years to create a major regional park with outdoor recreational facilities. Randleman Lake's recreational purpose thus becomes apparent, allowing the area to attract new residents and businesses.

- Certain towns and cities in the area are already dry or virtually dry. Geographers in recent years have ranked the area at or near the top of national studies on livability. There is no way the two-county, five-city region can maintain such a high standard of living and serve its present population — much less new residents and businesses — without water. Moreover, a new wastewater treatment plant in High Point will ensure that Randleman Lake will will provide clean water for area residents and businesses.

Finally, I must emphasize that local support for Randleman Lake is united and strong. The Boards of County Commissioners of Guilford and Randolph Counties; the City Councils of Greensboro, High Point, Archdale, Jamestown, and Randleman; the Governor's office; and Representative Cobey and I are solidly behind the project. Based on current costs and the Administration's cost-sharing policy, 69% of total funding for Randleman Lake will be paid by state and local governments. Given that the new cost-sharing requirements can and will be met, Randleman Lake cannot be characterized as just another pork barrel project. Indeed, it is the very kind of water project worthy of federal assistance.

Water is an indispensable natural resource. Without it, communities cannot sustain themselves or expand. The affected areas of the Fourth and Sixth Congressional districts urgently require a multi-purpose water project which will meet their regional demands. Therefore, I cannot emphasize strongly enough the need for this Subcommittee to recommend the appropriation of $3 million for the Randleman Lake project in fiscal year 1987 legislation.

Thank you for your time and consideration.

Howard Coble

HOWARD COBLE
Member of Congress

Mr. **Bevill**. We are pleased to have you with us, Mayor.

Mr. **Forbis**. Thank you very much, Mr. Chairman, and gentlemen. I will be brief.

I am John Forbis, Mayor of the City of Greensboro, North Carolina, and I thank you again for affording me the opportunity to testify before you on a project which was first recommended in 1928 as the regional solution to our water needs. A number of significant events have occurred concerning the proposed Randleman Dam project since I appeared before you in March of 1985. I would like to outline these.

First, a comprehensive water resource study by a respected consulting firm has been completed. This study again reaffirmed the fact that this project is the best alternative for providing an adequate, cost-effective, and dependable long-term water supply for Piedmont, North Carolina. This conclusion was reached following an extensive evaluation of 40 alternatives.

Second, the six units of governments that would benefit from this project have all embraced it as the best alternative. Presently, these governments have moved toward forming a water authority to administer the equitable distribution of water based on need and to attend to other business as appropriate.

Third, both Congressman Coble and Congressman Colby, in whose districts this project would be built, have embraced this construction and recognized its need for the continued vitality of the region.

Fourth, the State of North Carolina has reaffirmed its commitment and its financial support of the project as late as last month, and its interest is shown by the Secretary of the Department of Natural Resources and Community Development, who is here with us today.

Fifth, the use of water by the benefitting communities has increased since last year and will continue to increase. The 10 years or more of time required for project construction puts Greensboro dangerously close to the date that the spigots will run dry. With a population in excess of 400,000 people who will need this water, delay is a luxury which we can no longer afford.

We feel that the Federal Government has also recognized the need and made a commitment through the $4 million spent to date for advanced engineering work. Gentlemen, I employ you to include this urgently needed project for start-up funds in the amount of $3 million in a supplemental or appropriations bill this year for the Randleman Dam project.

I thank you for the opportunity to be here. I will entertain any questions.

Mr. **Bevill**. Very good statement. Thank you.

Mr. **Forbis**. Thank you, sir.

Mr. **Bevill**. Yes.

Mr. **Cobey**. Mr. Chairman, I, too, want to thank you for your patience, and Mr. Myers' patience. I talked to you a few times on the Floor, also, and as you can tell, sitting before you this morning is a little bit of a change. We have a united front. We all stand in support of the project, recognizing that after receiving two very comprehensive studies that this is the best route to take.

So, we hope that we can be included in the budget. We are willing, as local entities, and also as a State, to accept whatever cost-sharing formula for multi-purpose facilities like this that you come up with. We are ready to go, and hope you can include this in the budget.

At this time, I want to introduce for a few comments the Chairman of the County Commission, Mr. Darrell Frye, Chairman of Randolph County. As you remember, Darrell and I testified last year in opposition to the project, and this is now an indication of the support of that county, also.

So I would like to turn it over to Chairman Frye.

[The statement of Mr. Cobey follows:]

CONGRESSMAN BILL COBEY'S TESTIMONY
ON
THE PROPOSED RANDLEMAN LAKE TESTIMONY
BEFORE
THE HOUSE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
April 14, 1986

Mr. Chairman, thank you for allowing us to testify before this committee.

It is a special occasion for all of us at this table to be testifying together in support of the Randleman Lake project -- a project which would benefit Randolph and Guilford counties in North Carolina.

Last year, Chairman Frye and I were not convinced the Randleman Lake project was the best water source for our area.

But after we studied two comprehensive local reports on all the water source options available to Randolph and Guilford counties, it became clear that the Randleman Lake project is the most cost-efficient and abundant water source available to the people in our area.

We are all now united in support of the Randleman Lake proposal.

Just as important, the state and local sponsors of the Randleman Lake project are prepared to accept whatever cost-sharing formula Congress develops for multi-purpose water resource projects.

Randleman Lake has been studied extensively and has been proven as the best water source available to our region. Thus, I join the officials here today in asking that this subcommittee include in the budget the funds needed to begin construction of the Randleman Lake project.

Thank you.

Mr. **Bevill**. Be glad to hear from you.

Mr. **Frye**. Chairman Bevill and members of the committee, I am Darrell Frye, Chairman of the Board of County Commissioners in Randolph County, which is the site for the proposed Randleman Reservoir. It also happens to be the home of my more famous resident, Richard Petty, in whose district it would actually be located. And he, too, sends his endorsement and support of the project.

I could add several comments that the Mayor has made. I am presenting a written copy to you today. But I would just like to say to you that in our region, we are on a collision course as it relates to a long-term water supply for our region. From the Federal Government to the State capitol to the local courthouse, we are all experiencing funding dilemmas as it relates to reducing deficits and balancing budgets.

Never before, I think, has it been more imperative that we show fiscal restraint, wise spending habits, and invest in those projects and areas that will provide areas to grow and provide jobs for our citizens and for our tax base to expand in order that we might have revenues to provide for the needs of our citizens.

When and if this takes place will depend upon funding priorities of you. We sit before you today as a united body. Our local governments, our Congressmen, the State of North Carolina, and the majority of the citizens in our region all support this project.

I will just add that this is after a lot of hard work, a lot of investigative process that we have gone through to come to this point today.

I am here today to ask you to give it your support by providing the $3 million in start-up funds under the new construction category in the 1987 fiscal budget. I appreciate the chance to appear before you and express my views, and I thank you in advance for your consideration of this project.

[The statement of Mr. Frye follows:]

TESTIMONY BY DARRELL FRYE, CHAIRMAN, RANDOLPH COUNTY BOARD OF COMMISSIONERS OF NORTH CAROLINA BEFORE THE ENERGY & WATER DEVELOPMENT SUBCOMMITTEE, HOUSE APPROPRIATIONS COMMITTEE, WASHINGTON, DC, APRIL 14, 1986.

Mr. Chairman and members of the subcommittee on Energy and Water Development Appropriations:

Thank you for giving me this opportunity to submit testimony to you on the funding needs for the Randleman Lake Project. In the 1940's, the Corps of Engineers and others saw the potential conflict between growth and limited water supply in our area, so they began planning the multi-purpose Randleman Lake, which has benefits of water supply, flood protection and recreation.

The Randleman Lake Project was authorized in the Flood Control Act of 1968, and, as a result of the appropriations that you have approved to date, the Corps has completed all the advanced engineering and design work. Thus, the project is ready to become what is called a new construction start, subject, of course, to the appropriations process.

Why do we need this project? The citizens and industries of six cities and towns--Asheboro, Randleman, Archdale, Greensboro, High Point and Jamestown and Randolph County--are expected to obtain water supplies from Randleman Lake.

Our existing water resources will be insufficient in some communities within the next 5 to 7 years. By the year 1999, our largest city in the basin could be water short.

The two counties served by this project, Randolph and Guilford, have a combined population of more than 417,812 according to recent population estimates. During the Seventies, Randolph grew by 20.3 percent, and Guilford grew by almost 10 percent. In all likelihood, similar rapid growth will continue throughout the Eighties and beyond and will accelerate the pressing needs for water supply.

The Corps of engineers estimates that the cost of building the project at this time is $112,000,000. The non-federal re-imbursement of this cost amounts to $76,730,000; this is 68.5% of the total cost. This clearly indicates, I think, the commitment for the project among residents of Randolph and Guilford counties and the state of North Carolina.

To date the federal government has spent more than $4,000,000 on the planning engineering and design work for Randleman Lake. An adequate return on this substantial investment can only be realized by going forward with land acquisition and construction. It would be costly and unwise to delay this project further and cause local governments to lose the benefits of the preliminary work already done.

All local governments, congressmen, Chamber of Commerce officials and others from Randolph and Guilford counties are in full support of the Randleman Lake Project.

We are on a collision course. We need help now if we are to provide the water needed to meet our future demands. In these times of tight money brought on by Federal Cut-Backs, we must make wise investments for the future. For local Governments to compensate for the loss of these funds, we must invest in those resources which will enable our tax base to expand. The Randleman Lake Project represents such an investment.

This reservoir will, as I have indicated, provide an urgently needed water supply for a great majority of residents of Randolph and Guilford counties in the 1990's. The year they begin receiving this water supply depends, of course, on when land acquistion and construction begin and on continuing appropriations from then until completion. It is my sincere hope that start-up funds will be appropriated in FY'87 in order that construction can get under way.

I urge you to accord top priority to the Randleman Lake Project when you take action on projects in the "new construction starts" category.

Thank you for your consideration of my views on the important project.

Mr. BEVILL. Very good.

Mr. COBEY. Mr. Chairman, I want to recognize that I have, too, talked to Mr. Watkins a number of times. I appreciate your patience, too, with this project.

We have one more member of the panel that we would like you to hear from, a distinguished representative of the State of North Carolina. But, since Howard served with him in the State Legislature, Howard will do the honors of introducing him.

Mr. COBLE. I will be brief, Mr. Chairman.

Mr. BEVILL. We are delighted to have both of you, your colleague and friend here, and we will be glad to hear from you.

Mr. COBLE. This is Tommy Rhodes, Mr. Chairman, the Secretary of the Department of Natural Resources and Community Development. He is here representing his department, and our Governor, Governor Jim Martin, who is a former member of Congress.

Mr. RHODES. Thank you, Mr. Chairman and members of the committee. My name is Tommy Rhodes, and I am Secretary of the North Carolina Department of Natural Resources and Community Development.

As Congressman Coble has indicated, I am here today representing the administration of Governor James G. Martin to support the Randleman Lake project and to request action by this committee to appropriate funds for a construction start on this project in fiscal year 1987.

The State of North Carolina has supported the Randleman Lake project during four successive administrations, including periods of Democratic and Republican leadership. As requested by the Administration, North Carolina has expressed its intent to comply with the cost-sharing policies recommended by the Administration, subject to subsequent action by Congress.

The Administration is calling for a non-Federal cost share of 35 percent of the flood control cost of the project, 50 percent of the recreation cost, and 100 percent of the water supply cost. This means that the State of North Carolina and our partner local governments have expressed our intent to pay over 69 percent of the total estimated cost of the project, leaving only 31 percent to be borne by the Federal Government.

Flooding on the Deep River and downstream on the Cape Fear River has been a continuing source of property damage and economic losses. Randleman Lake will provide a major reduction in flood damages at five towns along the Deep River, and additional flood control benefits on the Cape Fear River.

The Piedmont Triad region of North Carolina is lacking in outdoor recreation opportunities for its growing population. For many years, the leaders of this region have attempted without success to establish a major regional park. Randleman Lake offers the opportunity to meet this outdoor recreation need along with the other associated purposes of the project.

Of all the major urban regions of North Carolina, the Piedmont Triad is the only one lacking an assured long-range source of raw water. The five cities and towns and the two counties supporting the Randleman project have in some cases exhausted their available water supplies and in other cases will run short during the 1990s.

It is urgent to begin construction on the Randleman Lake project in 1987 to avoid the economic dislocation that will be the result if water supply is inadequate.

Thank you for the opportunity to share with you North Carolina's urgent need for a construction start on the Randleman Lake project.

Thank you.

[The statement of Mr. Rhodes follows:]

Written Testimony on Randleman Lake

by

Secretary S. Thomas Rhodes

North Carolina Department of

Natural Resources and Community Development

Provided to the

House Subcommittee on Energy and Water Development

April 14, 1986

Summary

The Administration of Governor James G. Martin, represented by the Department of Natural Resources and Community Development, supports a federal appropriation in fiscal year 1987 for a construction start on the Randleman Lake Project (U. S. Army Corps of Engineers) to meet urgent regional needs for flood control, water supply, and recreation.

CURRENT STATUS

The Randleman Lake Project was authorized by Congress in 1968. The project is to be constructed on the Deep River, a tributary of the Cape Fear River, about two miles upstream from the Town of Randleman, North Carolina. The project will require about 10,000 acres of land, of which about 75 percent will be in Randolph County with the remainder in Guilford County. The Randleman Lake Project is a multipurpose project for water supply, recreation, and flood control. The Corps of Engineers has completed an environmental impact statement on the project, as well as the planning and preliminary design work. The project was in the President's recommended budgets for FY's 1983, 1984, 1985, and 1986. An appropriation for a construction start has been held up pending the resolution of differences between the Administration and Congress on national policies for cost sharing at civil works projects.

After over twenty years of planning, the following steps have been taken toward the implementation of the Randleman project:

- $4.1 million has been spent by the U. S. Army Corps of Engineers on environmental studies, real estate surveys, planning, and engineering for the project.

- The North Carolina Department of Transportation has spent an additional $387,000 on the relocation of U. S. 220 to make it compatible with plans for the Lake.

- Local governments have expressed their intent to pay the water supply cost of the project and are working together on cooperative plans for the distribution and treatment of the water.

- The State of North Carolina has expressed its intent to pay the non-federal cost share for flood control and recreation and to operate and maintain the recreational facilities.

Need for Water

Greensboro, High Point, and the surrounding urban area in Guilford and Randolph Counties are in the upper end of the Cape Fear River Basin. The streams in this area are relatively small and tend to have low flows during summer dry periods. Large supplies of water are less available in this region when compared to some of North Carolina's other major cities, which are near the main stems of our larger rivers. Seven local governments have expressed active interest in water supply storage at Randleman Lake. These are Greensboro, High Point, Guilford County, Jamestown, Randleman, Archdale, and Randolph County. Projections of water supply needs compared to the yield of current available sources for these six local governments indicate the need for a substantial additional water supply during the 50-year planning period. Several of the communities will need additional supplies during the 1980's and 1990's.

Alternative Sources of Water Supply

There are several sites in the Piedmont Triad region that could be developed for water supply storage. At various times a number of alternative sites to the Randleman Lake Project have been identified on the Deep River, the Haw River, and other smaller streams. These other sites, either singularly or in combination, could supply the amount of water needed to meet future regional needs. The selection of the Randleman Lake Project as the preferred alternative has been primarily influenced by its advantages as a regional water supply source and a multipurpose project. Randleman Lake is well situated to serve Greensboro, High Point, and other nearby communities in northern Randolph County and southern Guilford County very efficiently. The participating communities are pursuing an option of constructing a jointly-owned treatment plant to process water from Randleman Lake and distribute it to the using communities. This regional cooperation will result in significant cost savings. The Randleman Lake Project is also the only alternative that offers the partnership arrangement with the State and the federal government to provide recreation and flood control benefits as well as water supply.

Independent Water Supply Study

After construction funds were not appropriated for the Randleman Lake Project in 1984, six local governments funded an independent study of their water supply alternatives. The study, completed in May, 1985, was the product of the national engineering firm CH2M Hill and was funded by Greensboro, High Point, and Jamestown in Guilford County, and by Randleman and Archdale in Randolph County, as well as by Randolph County. After review of forty alternative sources of supply, the study concluded that Randleman Lake is the most feasible and desirable alternative to meet regional water supply needs. The study indicated that presently available water supplies will be exhausted in Randolph County by 1991, in Archdale by 1994, in Greensboro by 2000, and in High Point and Jamestown by 2008. The City of Randleman's supply is already inadequate. If the Randleman project is not begun by 1987, other water supply alternatives must be implemented. These alternatives would cost more, take longer to build, and will not accomplish the associated flood control and recreation purposes of the Randleman project.

Water Quality

The plan for Randleman Lake includes the construction of a sewer bypass to take the treated wastewater from High Point and Jamestown and discharge it into the Deep River below the dam. This would protect Randleman Lake from nutrients in wastewater which are not removed by normal wastewater treatment techniques. These nutrients tend to cause a problem with algae and rooted plant growth in reservoirs, whereas they do not ordinarily cause a problem in the flowing water environment of a river. The sewer bypass would also protect Randleman Lake from the consequences of a sewer pipeline break or treatment plant breakdown that could temporarily allow untreated wastewater to discharge into the lake. With the construction of this bypass, only minor point sources of wastewater are located above Randleman Lake. There are about 22 of these minor point sources with a total of about 330,000 gallons per day capacity. The Department of Environmental Sciences and Engineering at the University of North Carolina studied the likely quality of water in Randleman Lake based on the quality of water in the tributary streams. This study concluded that with the sewer bypass in place, Randleman Lake would be highly acceptable for both drinking water use and recreation. Local governments in the project area will need to take steps to control non-point sources of water pollution to assure the future protection of water quality in the lake.

Flood Control

Flooding along the Deep River has periodically damaged property and caused community economic losses. On an average annual basis, these losses total almost $600,000 (1985 dollars). Flood waters from the Deep River also contribute to flooding downstream along the Cape Fear River, where average annual damages exceed $800,000, even with B. Everett Jordan Lake in operation. Major floods have occurred in the Cape Fear Basin in 1908, 1928, 1929, 1945, and 1947. The Randleman Project will provide a major degree of flood protection to commercial and residential property and to roads, bridges, and utilities in the Towns of Worthville, Franklinville, Ramseur, Coleridge, and Cedar Falls. The project's flood control benefits will extend downstream to provide a lesser degree of additional protection along the Cape Fear River.

Recreation

Randleman Lake will offer a variety of publicly owned and managed recreation facilities. These will include camping, picnicking, swimming, fishing, boating, hiking, nature study, and group camping areas. Recreation needs in the project area have been studied by the Research Triangle Institute, by the NRCD Division of Parks and Recreation, and by the Corps of Engineers. The conclusion of all these studies is that the five county area around the proposed Randleman Lake is deficient in public outdoor recreation opportunities. Randleman Lake's high quality outdoor recreation facilities will be available to the general public and particularly accessible to low and moderate income persons. Experience at other locations in North Carolina indicates that the availability of a nearby high quality outdoor recreation site such as would be provided by Randleman Lake is a key element in attracting desirable industry and economic development.

Land Requirements

The Randleman Lake Project will require about 10,000 acres of land. About 1,725 acres would be specifically for recreation. The remaining lands will be for the conservation pool, for the flood control pool, and for a buffer around the lake to protect water quality. The project was recently reviewed to remove about 800 acres of recreation lands that were not absolutely required. The Randleman Lake Project is relatively economical in land requirements. Randleman Lake will provide 48 mgd of water supply and require 10,000 acres of land. The Jordan Lake Project, another multi-purpose impoundment in North Carolina, provides 100 mgd of water supply but required about 47,000 acres of land.

Mr. Bevill. We appreciate your fine testimony, and you have come a long way on this project in that everybody seems to be together on it.

Ironically, as you know, the Administration had put it in their budget for the last two years, except this year. They left it out this year even though they recommended some new construction starts I think for the first time in several years. But we will certainly do what we can to work with you, and we have been impressed with the support you have provided.

I know Congressman Bill Hefner talked to me this morning about it, and he has talked to me before. Bill and Howard both have been doing great things, and we will work with you the best we can. We do have our limitations, as you know, with what we can do, particularly with the deficit thing that we are all struggling to overcome. But we will work with you and do the best we can.

I think I have heard from just about everybody in North Carolina, Mayor, except Dr. Billy Graham.

Mr. Forbis. He is going to be here at the end of the month.

Mr. Bevill. He didn't mention it when he was up here the other day. I had lunch with him. He is a great man. I think a lot of him.

We appreciate you all and the entire North Carolina delegation. Thank you very much.

Mr. Myers. Mr. Chairman, I might say something. I didn't realize it had been around since 1928. The Chairman and I have been on the committee for a long time, but not that long.

Frankly, up until about a year ago, we were uncertain about whether you really wanted it in North Carolina or not. Even the congressional delegation couldn't decide. It is not the fault of either one of you. Both Mr. Cobey and Mr. Coble—both said they were not against it.

Of course, Howard, you have been for it all along.

Mr. Coble. After this report was submitted, yes.

Mr. Myers. You have been involved in this for quite some time. But, Bill, you were wanting to get the study first to see what it would be.

Both of you testified not against it but you thought the study was necessary, and the committee went along with you. We understand that the study was necessary, and we are pleased to see such unanimous feeling on it now.

Certainly, Howard, I wouldn't say you are a nuisance quite, not quite; but this committee considers several hundred projects. I must honestly say that I don't know anybody that has been more persistent than these two right here. Howard particularly, I think, calls me at least two or three times a week and catches me on the Floor. And, Bill, you have been following up very much like that in the past year.

If persistence has anything to do with it, we will get it started right away. Again, I say, I don't know any project that anybody has been more persistent on than the two of you have been on the Randleman. I have not been down to see it, but I guess I am going to have to see it soon.

Would you not call me once a week if I came down to see it?

Mr. Coble. I promise never to bother you again.

Mr. **Myers**. Your are not a bother.

Mr. **Cobey**. You notice he came in with a cane to get sympathy.

Mr. **Coble**. Mr. Chairman, I was accused out in the hall of hoping to get sympathy from you and the committee members today, but if that works I will keep the cane.

Mr. **Myers**. You have gotten everything else out of us except sympathy; I will tell you that. I promise you I will come down and look at it.

Mr. **Coble**. Be glad to have you come down and see it.

Mr. **Forbis**. Be glad to have you see it.

Mr. **Myers**. I can't speak for you, Tom, but I hear so much about it I am going to go look at that lake.

[The letter follows:]

HIGH POINT CHAMBER OF COMMERCE

704 NORTH MAIN STREET P.O. BOX 5025 HIGH POINT, NORTH CAROLINA 27262
(919) 889-8151

April 11, 1986

APR 17 RECD

The Honorable Thomas Bevill
U. S. House of Representatives
Washington, D. C. 20515

Dear Representative Bevill:

Please enter into the Public Hearing Proceedings for Appropriations for Federal Water Projects, Fiscal Year, 1987, the following statement:

> "The High Point Chamber of Commerce, High Point, N. C., located in Guilford County, N. C. (6th District, N. C.) supports and urges the House Energy and Water Development Sub-Committee to fund $3,000,000 start-up monies for the Randleman Dam Project on Deep River in Guilford and Randolph Counties, N. C., for the Fiscal Year, 1987."

The High Point Chamber of Commerce has strongly supported funding for this project since February 19, 1974.

Thank you and the Committee for your kind consideration.

Sincerely,

Charles Greene
Chairman of the Board

CG/ns

cc: The Honorable Howard Coble

Sub-Committee on Energy and Water Development
Rayburn House Office Building
Room 2302
Washington, D. C. 20515

MONDAY, APRIL 14, 1986.

GULF INTRACOASTAL WATERWAY AND CORPUS CHRISTI SHIP CHANNEL

WITNESSES

DALE MILLER, CHAIRMAN OF THE BOARD, GULF INTRACOASTAL CANAL ASSOCIATION

J. DUANE ORR, PRESIDENT, GULF INTRACOASTAL CANAL ASSOCIATION

HARRY G. PLOMARITY, EXECUTIVE DIRECTOR, PORT OF CORPUS CHRISTI AUTHORITY

LEROY GOODSON, GENERAL MANAGER, GULF INTRACOASTAL CANAL ASSOCIATION

Mr. BEVILL. Next we have Mr. Dale Miller and Mr. Duane Orr. You may proceed.

[The statement of Congressman Ortiz follows:]

Testimony of Congressman Solomon P. Ortiz
House Energy and Water Appropriations Subcommittee
April 14, 1986

Mr. Chairman, and members of the Subcommittee, I appreciate the opportunity to appear before the Subcommittee on behalf of water projects from the State of Texas. I represent the 27th District of Texas which has several projects earmarked for funding this year, and I urge the members of the Subcommittee to favorably consider these budget requests. Each one of these projects was recommended for funding by the U.S. Army Corps of Engineers in its Fiscal Year 1987 Civil Works Budget Request.

The 27th District of Texas is located along the Gulf Coast of Texas and is highly dependent upon water traffic for its economic health and well-being. The FY87 funding proposal recommended by the Corps of Engineers represents, I believe, a careful and prudent course of improvement and continued operation and maintenance of essential water projects in my Congressional District. I would like to strongly urge the members of this subcommittee to support funding for all of these projects.

Representatives of the Port of Corpus Christi, Texas, and the Gul Intracoastal Canal Association will be testifying before your subcommi this morning. I am sure that they will be able to more than adequatel outline the need for funding for their projects, but I would also like lend my support and endorsement of their testimony.

The Corpus Christi, Texas Ship Channel will be requesting funding totalling $9,730,000 in FY87. This represents $2,730,00 for operation and maintenance, along with $7,000,000 for construction on the navigat project. The Corps recommendation of $7,000,000 would continue the project which has been funded in prior fiscal years. The overall proj is 57% complete. Construction of retaining dikes around various areas that are required for disposal of the dredged material is underway, wi two of the disposal areas having been completed. Construction of retaining works for another disposal area, Suntide will be initiated i May 1986. The initial contract for dredging the inner channel from Be 82 through the Chemical Turning Basin is nearing completion. Funds programmed for Fiscal Year 1987 will be used to complete construction the retaining dikes for dredged material at the Suntide disposal area to initiate dredging of the inner harbor channel from the Chemical Tur Basin and Tule Lake Turning Basin in January 1987. The entire project except the unscheduled second mooring area, is scheduled for completio December 1988.

Testimony of Congressman Solomon P. Ortiz
Page 3
April 14, 1986

The request for the Protection of Navigation Category for Fiscal 1987 is $4,226,000 of which $4,166,000 will be used for the General Regulatory Function. These funds will be used primarily in connection with responsibilities associated with the wetlands of the Division are such as the marsh lands along the Gulf Intracoastal Waterway. In addition, The Gulf Intracoastal Waterway, Texas has received a funding request from the Corps of $13,127,000 for operations and maintenance o the navigation project.

Representatives from Cameron County, Texas, and the Port of Brownsville, Texas, were unable to appear before the Subcommittee, and would like to lend my support to these projects and briefly describe t

The Corps of Engineers has requested $75,000 for flood damage prevention survey studies in Cameron County, Texas. This sum will be equally matched by local sponsor contributions. This is for the initiation of the feasibility phase of a study in partnership on a 50- cost sharing basis with local sponsors. These requested funds, along local sponsor contributions, will permit meeting the scheduled complet on the Cameron County, Texas study in September 1989.

Testimony of Congressman Solomon P. Ortiz
Page 4
April 14, 1986

The Corps of Engineers has recommended $3,220,000 in total fundin for the Brazos Island Harbor, Texas. providing $300,000 for surveys an $2,920,000 for operation and maintenance of this navigation project, which is located in Brownsville, Texas. These monies will provide $300,000 for initiation of Continuation of Planning and Engineering activities on one project, Brazos Island Harbor, Texas. The proposed of improvement provides for modifying the entrance channel from a dept 36 feet to 44 feet at a width of 400 feet; the interior channel from 3 feet deep by 200 feet wide to 42 feet deep by 300 feet wide; and enlar the turning basin area. The total cost of the proposed plan would be about $31,800,000 and result in a benefit-to-cost ratio of 1.5 to 1 at 8-5/8 percent interest rate. Completion of Continuation of Planning a Engineering for the Brazos Island Harbor project is scheduled for Marc 1990.

Thank you for providing the opportunity to testify in support of projects located in my Congressional District. I look forward to favorable action from this Subcommittee.

Mr. **Miller**. I am Dale Miller.

Mr. **Bevill**. Always glad to have you before us. We look forward to hearing you. You may proceed as you wish.

Mr. **Miller**. I am Chairman of the Board of the Gulf Intracoastal Canal Association, and Washington representative of the Port of Corpus Christi. I have no statement of my own, but I want to associate myself with the remarks of Mr. Orr, with the Association, and Mr. Plomarity with the Port of Corpus Christi.

I just want to take this moment to say, Mr. Chairman, that although we happen to be from Texas, it is entirely appropriate we are here on Alabama Day. Our waterway was created under the auspices of our association over a long period of years now extending from the Mexican border to the West Coast of Florida, and our primary objective of recent years has been the development for navigation of the principal tributaries of the canal to extend the benefits of low-cost water transportation in the hinterlands.

So, it goes without saying we clearly support the request made by the Alabama group this morning.

Mr. **Bevill**. Very good. Thank you.

Mr. **Orr**. Chairman Bevill, I am Duane Orr, appearing before you today for the second time as President of the Gulf Intracoastal Canal Association, whose principal offices are in Austin, Texas.

Mr. LeRoy Goodson, Executive Vice President of the Association now, is here attending the meeting for the first time, also.

For many years, it has been Mr. Miller's and my privilege to appear before you in support of funding for the Gulf Intracoastal Canal Waterway. Mr. Miller presently serves as Chairman of the Board.

We appear before you in support of adequate appropriations for the Corps of Engineers to continue maintaining the Gulf Intracoastal Waterway to its constructed dimensions, and to assure its efficient operation in accommodating the 93 million tons of commerce which it now handles.

We appear before you today supporting appropriations from the States of Texas, Louisiana, Mississippi, Alabama and Florida, totaling some $36.7 million for maintenance of the waterway, and $625,000 for continuing the present authorized study, both items of which are included in the President's budget.

In addition, we support the President's budget recommendation of $4.7 million to continue construction of the Colorado River Gulf outlet near Bay City, Texas.

Additionally, we support the recommended appropriation of $190,000 for the Victoria Barge Canal and $800,000 for the Arkansas Pass Tributary Canal to Conn Brown Harbor, which connects with the Corpus Christi, Texas ship channel near Harbor Island, Texas.

The waterway has lost some tonnage in the last few years. It now is on the upswing again.

The Gulf Intracoastal Canal Association was formed back in 1905, 81 years ago, in Victoria, Texas, and has been active throughout that period of time.

The GIWW has achieved by far the highest ratio of benefits to cost of any waterway in the nation, handling 92,848,000 tons last year, which exceeds by over 19 times the figure of 5 million tons which was originally predicted for the waterway when it was authorized initially.

Commerce moved through the waterway in 1984 totaled 17,107,900,000 ton miles.

It is a notable fact that in this period since the increased waterway dimensions between New Orleans and Houston was authorized in 1966, commerce in this segment of the waterway has more than doubled.

Congress has historically supported the waterway projects, which are accessible to all as a matter of national interest. This far-sighted view of Congress has enabled the nation's waterways to become the best in the world. For this reason, we would encourage the Congress not to deviate from its past policy of authorizing those improvements and the maintenance of the waterway to its authorized dimensions.

Mr. Miller, Mr. Goodson and I appreciate having the opportunity to appear before you today in support of the Gulf Intracoastal Canal Association's programs, which, succinctly stated, is to promote economic, industrial and recreational development of the Gulf Coast of Florida, Alabama, Mississippi, Louisiana and Texas by a system of waterways that provide both public recreational and low-cost water transportation benefits for the nation.

Thank you, Mr. Chairman.

I wish to file a statement for the record.

[The statement of Mr. Orr follows:]

GICA
GULF INTRACOASTAL
CANAL ASSOCIATION
Organized At Victoria, Texas - August 8, 1905

206 San Jacinto Building
Austin, Texas 78701
Area Code 512/499-8881

DUANE ORR
President
Corpus Christi, Texas

VERNON BEHRHORST
Chairman Executive Committee
Lafayette, Louisiana

R.H. "BOB" PARKER
Vice Chairman Executive Committee
Houston, Texas

LEROY GOODSON
General Manager

STATEMENT OF J. DUANE ORR
PRESIDENT OF THE GULF INTRACOASTAL CANAL ASSOCIATION
BEFORE THE HOUSE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APRIL, 1986

Mr. Chairman and Members of the Subcommittee:

My name is J. Duane Orr. I am appearing before you for the second time as President of the Gulf Intracoastal Canal Association, whose principal offices are in Austin, Texas. For many years it has been Mr. Miller's and my privilege to appear before you in support of funding for the Gulf Intracoastal waterway. Mr. Miller is presently serving as Chairman of the Board of Directors for the Gulf Intracoastal Canal Association (GICA). We appear before you today supporting adequate appropriations for the Corps to continue maintaining the Gulf Intracoastal Waterway to its authorized dimensions in order to assure that its efficient operation will not be impaired. Many federally authorized shallow-draft and deep navigation projects are represented here today by well-informed witnesses who will appear during the course of your hearings. Therefore, my function will be to depict briefly a broader picture of the impressive development of the Intracoastal Waterway which has occurred along the Gulf Coast since the first segment of the Canal was authorized in 1925 and 1927.

REQUESTED APPROPRIATIONS

I appear before you today supporting appropriations for maintenance funds totalling $36,757,000 and study funds in the amount of $625,000,both items being included in the President's budget. This is not to imply that additional funds, within the limits of the Corps of Engineers capability could not used, but because of the necessity of limiting federal expenditures, the Association would be satisfied with the appropriation of the funds recommended in the President's budget.

In addition, we support the President's budget recommendation of $4,700,000 to continue construction of the Colorado River Gulf outlet at Bay City, Texas.

For the first time, the budget carries the Victoria Barge Canal and the Tributary Canal to Aransas Pass as separate items. We support the recommended appropriation of $190,000 for the Victoria Canal and $800,000 for the Aransas Pass Channel between Conn Brown Harbor and the Corpus Christi Ship Channel adjacent to Harbor Island,Texas.

PURPOSE AND HISTORY OF GULF INTRACOASTAL CANAL ASSOCIATION

Our Gulf Intracoastal Canal Association, one of the oldest waterway Associations in the United States was organized in 1905, 81 years ago.

Through the years it has supported and actively cooperated with Congress and Government agencies in creating the Gulf Intracoastal Waterway (GIWW), a complex of inland navigation facilities which has come to be regarded as the most remarkable artery of transportation in the United States.

The GIWW has achieved by far the highest ratio of benefits to costs of any waterway in the nation--or in fact any other form of transportation. Preliminary figures for 1984 commerce on the waterway indicates the waterway handled 92,848,000 tons which exceeds by over nineteen times the figure of 5,000,000 tons which was originally predicted for the waterway when it was authorized initially. Commerce moved thru the waterway in 1984 totalled 17,107,900,000 ton miles. This represents almost a nine (9%) percent increase in commerce. It is a noteworthy fact that this waterway returns each year more than $26 in savings in transportation costs for every dollar which the Federal Government has expended in the construction, maintenance, and operation of this waterway.

I am aware these facts are known to many members of your Subcommittee, who have been close to this inland waterway system for years; but I review these facts briefly to place them in proper perspective in my appearance before you today in behalf of adequate appropriations to continue providing the transportation savings which the Intracoastal waterway and related deep-draft navigation projects provide. I have no hesitancy in asserting that past service provided by the GIWW fully justifies your favorable consideration of continuing maintenance appropriations for this waterway.

NEED FOR FURTHER WIDENING AND DEEPENING OF THE GULF INTRACOASTAL WATERWAY

With respect to the Gulf Intracoastal Waterway the most important future need will be the deepening and widening of the main canal to accommodate increased waterborne commerce and relieve some of the current navigational hazards. Congress has already authorized new dimensions for the busy segment of the waterway between New Orleans and Houston increasing the depth from 12 to 16 feet and widening the canal from 125 to 150 feet and 200 feet respectively. We are confident that your Subcommittee shares the Association's awareness of the importance of this waterway. At the present time we are not requesting funds to initiate construction, since local right-of-way problems have yet to be resolved. Inasmuch as the authorized improvements span a distance of 350 miles, problems of rights-of-way and pipeline relocations and other items of local corporation such as the "hold harmless agreement" are of course formidable issues, but we intend to see that they are resolved. Our only request now to the Subcommittee is that you keep in mind the importance of this undertaking to the Nation until such time as we seek funds to commence construction.

It is a notable fact that during the period since these increased dimensions were authorized in 1966, commerce moving over the Waterway has more than doubled. In other words, if Congress found it desireable to authorize the deepening and widening of the waterway when the traffic was less than half of what it is today, what might be said of the waterways' actual needs and requirements now. Because of increased traffic the Association secured authorization from Congress for the Corps of Engineers to up-date its studies which led to authorization of the increased dimensions and the present study which is underway that may justify still further waterway improvements.

We are recommending to this Subcommittee that it provide funds in the amount of $625,000 which is needed by the Corps of Engineers in the New Orleans and Galveston Districts to bring this important investigation and study to an expeditious conclusion. These funds are included in the President's recommended budget.

INTERCONNECTING WATERWAYS AND THEIR IMPORTANCE TO THE NATION

Virtually all navigation projects along the Gulf Coast--both deep-draft and shallow-draft channels--either coincide with, or are tributary to, the Gulf Intracoastal Waterway. For this reason our Association has a vital interest in the continued development and improvement of these projects. Accordingly, we earnestly request that the Subcommittee give favorable consideration to the funding needs for all such navigation projects.

One of the most important objectives of the Gulf Intracoastal Canal Association is the extension of navigation into the hinderlands through the development of the principal tributaries. Of major importance in the eastern Gulf is the Tennessee-Tombigbee Waterway which was recently completed. Another project of major significance to inland navigation was the completion of the Leland Bowman lock to replace the obsolete Vermillion lock. Continuing construction on the lock and dam 27 is also of importance to this Association since it will benefit traffic on the GIWW. Navigation to Shreveport via the Red River waterway, improvements to the Atchafalaya as well as replacement of an adequate size lock on the east bank of the Mississippi River and other projects that I have not specifically mentioned are equally important to this Association and will benefit the Nation as each project is completed.

NEED FOR ADDITIONAL ACCESS TO THE GULF FOR ENERGY RELATED INDUSTRIES

As important as the tributary streams into the hinderlands are to inland navigation, access channels extending outward to the Gulf, especially in view of the increased activity in offshore energy development are equally important to this Nation. Improvement of existing facilities, and construction of new and deeper channels as required is essential to this development--as well as increased dimensions for the many progressive ports that exist on the Gulf Coast. The Gulf Intracoastal Waterway is a vital part of this activity, and our Association urges that the Appropriations Subcommittee be responsive to these needs.

FUTURE LONG RANGE PROJECT NEEDS FOR THE BENEFIT OF THE NATION

Two other projects are of vital interest to the Association. These are the extension of the Gulf Intracoastal Waterway from St. Marks to Tampa Bay, Florida--the missing link in this project inland waterway system which if dredged would extend the canal along the entire length of the Gulf Coast.

The other Project which the Association considers of vital importance to the Nation is the Cross-Florida Barge Canal, which was authorized to connect the Gulf and Atlantic inland waterway systems into a continuous navigation system extending from the Mexican border to the northeastern part of the United States. We look forward to the day that this project will be restored to an active status and can be completed and placed in operation. It remains our conviction that this connection is needed, and we look forward to the day when the Project will be reconsidered by Congress and it funded for construction.

APPROPRIATION OF FUNDS FOR STUDIES AND INVESTIGATIONS

Funds for studies and investigations, are equally important as are funds for construction. Without adequate appropriations realistic and beneficial public works program cannot be perpetuated. Funds in the amount of $625,000 have been requested by the New Orleans and Galveston Districts to continue the present ongoing study of further improvements needed to the waterway between New Orleans and Houston. Request for these funds are included in the President's budget. We wholeheartedly support this requested appropriation.

We also recommend that sufficient funds for rehabilitation of the waterway should likewise be supplied as needed to assure that the inland navigation system can operate at maximum efficiency.

CONSTRUCTION AND MAINTENANCE FUND REQUIREMENTS

Although requests for construction funds are customarily accorded, the greatest emphasis in these hearings, I would like to stress the over-riding importance of adequate appropriations for maintenance. Insufficient funds for maintenance often reduce the service rendered by existing rivers and harbors projects, with resulting losses in benefits which were available when the Project was completed initially.

PROPOSED CHANGES IN NATIONAL WATERWAY POLICIES

Even though continued Federal funding of this vital Gulf Intracoastal Waterway is of primary importance, perhaps the most important issues confronting us now are those currently under consideration by Congress. We are disturbed by pending legislation which would provide for an escalation of "user charges" on our inland waterways, and the assessment of "cost-sharing" or "cost-recovery" obligations on "local sponsor of projects" which actually are not local in character but are regional and even national in significance. All such proposals requires passing added costs along to the consumers, aggravating inflationary pressures which beset our economy. Such added costs will seriously imperil the role of navigation in the competitive market place of transportation. These issues are of major concern to all of us who are involved in our effort to develop and preserve a balanced transportation system serving the American public with a maximum degree of efficiency.

BUDGET CONSTRAINTS AND POTENTIAL IMPACT ON USERS OF THE GIWW

We realize during this period of severe Budget constraints that the problems confronting Congress are indeed formidable, and critical scrutiny must be applied to every budgetary item. But, we respectfully recommend that a long-range view be taken--a view of the potentially serious consequences which may be suffered by the imposition of additional burdens on the "users" and "local sponsors" of our national waterways system.

Congress has historically supported waterway projects which are accessible to all as a matter of national interest. This farsighted view of Congress has enabled the Nation's waterways to become the best in the world. The assessment of additional charges on the users, and on those who participate in the development of these waterways, could have a devastating effect on struggling marginal operators and on many small ports which depend on the waterways for their economic survival. We earnestly urge that Congress give thorough and deliberate attention to the gravity of this problem.

Mr. Miller and I appreciate the opportunity of appearing before you today in support of the Gulf Intracoastal Canal Association's program, which, succinctly stated, is to promote economic, industrial and recreational development of the Gulf Coast by a system of waterways that provides both public recreational and low cost water transportation benefits.

Respectfully submitted,

Dane Orr, President
Gulf Intracoastal Canal Association

cc:Officers and Directors

Mr. **Bevill**. Thank you.

Without objection, your prepared statement will be made a part of the record.

Each of you have a prepared statement—if you do, it will be inserted in the record.

Mr. Plomarity.

Mr. **Plomarity**. Mr. Chairman and members of the subcommittee, I am Harry Plomarity, Port Director, Executive Director of the Port of Corpus Christi, the local sponsor of the channel project.

I have submitted my prepared statement for the record, and I would like to take just a minute to summarize it.

I appear before you today requesting that Congress appropriate the following funds, which are included in the President's budget:

First, $7 million in construction funds to continue deepening and widening of the Corpus Christi ship channel project. The Corps' capability is the same as that in the President's budget.

Second, $2.73 million for maintaining the Corpus Christi ship channel as recommended in the President's budget. According to the latest Corps statistics, the Port of Corpus Christi ranks second in waterborne commerce among the Texas ports, and among the top 10 of the nation's ports.

In 1985, Corpus Christi water port commerce totaled over 52 million tons, slightly increasing over the previous year's tonnage after having experienced a steady decline beginning in 1978.

The decline in waterborne commerce at the port in recent years can be attributed primarily to three factors: one, general worldwide economic conditions; two, sharp reduction in crude oil imports; and three, the loss of a major share of grain exports due to an explosion at the Corpus Christi public elevator. Since returning to service, grain exports have been far below those of previous years.

Past congressional appropriations for constructing and maintaining the Port of Corpus Christi since it first opened in 1926 have certainly been justified. However, in order to complete the necessary improvements which are required to improve and maintain the ship channel, accommodate larger and increased traffic, we respectfully request that you consider favorably the appropriation of the funds as outlined.

Thank you very much.

[The statement of Mr. Plomarity follows:]

HARRY G. PLOMARITY, Executive Director

STATEMENT OF
HARRY G. PLOMARITY, EXECUTIVE DIRECTOR
PORT OF CORPUS CHRISTI AUTHORITY, CORPUS CHRISTI, TEXAS
BEFORE HOUSE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APRIL, 1986

Mr. Chairman and Gentlemen of the Subcommittee:

My name is Harry G. Plomarity. I am Executive Director for the PORT OF CORPUS CHRISTI AUTHORITY of Corpus Christi, Texas, the local sponsor of the federally authorized Corpus Christi Ship Channel, Texas Project.

REQUEST FOR FUNDS

I appear before you today requesting that the 99th Congress 2nd Session, appropriate the following funds which are included in the President's FY87 budget.

A. FUNDS NEEDED TO CONTINUE DREDGING OF THE AUTHORIZED 45-FOOT PROJECT

Appropriate $7,000,000 Construction funds to continue deepening and widening of the CORPUS CHRISTI SHIP CHANNEL PROJECT, pursuant to the 45-foot authorization included in Senate Document No. 99, Public Law 483, dated August 13, 1968. The Corps' capability being the same as that in the President's budget.

B. FUNDS FOR OPERATION AND MAINTENANCE OF THE C.C. SHIP CHANNEL PROJECT

Appropriate $2,730,000 for maintaining the Corpus Christi Ship Channel as recommended in the President's budget.

DESCRIPTION OF AUTHORIZED BUT INCOMPLETED IMPROVEMENTS

The following authorized improvements have yet to be completed:

A. Widening and deepening the Tule Lake Channel and Tule Lake Turning Basin between Mile 26.10 and Mile 29.30. Funds to complete the Project to Mile 31.60, the head of navigation will continue as funds become available.

B. Constructing levees, dikes, weirs, and providing drainage, bridges, etc. necessary to contain the dredged material and return the effluent to the Corpus Christi Ship Channel in the vicinity of the Viola Turning Basin.

C. Widening and deepening the Viola Channel and Turning Basin to the head of Navigation at Mile 31.60.

STATUS OF AUTHORIZED IMPROVEMENTS TO THE CORPUS CHRISTI SHIP CHANNEL PROJECT

All improvements to the Corpus Christi Ship Channel Project (formerly Port Aransas-Corpus Christi Waterway) authorized prior to the 90th Congress, 2nd Session have essentially been completed. Table No. 1 below shows the existing, the completed, and the authorized dimensions of the respective reaches of the waterway between the Gulf and the head of navigation at Mile 31.60.

TABLE NO. 1
STATUS OF CORPUS CHRISTI SHIP CHANNEL PROJECT
EXISTING AND AUTHORIZED WATERWAY DIMENSIONS
(AS OF APRIL 1, 1986)

SECTION OF WATERWAY	EXISTING DIMENSIONS (IN FEET)		AUTHORIZED DIMENSIONS (IN FEET)	
DESCRIPTION	DEPTH MLT	BOTTOM WIDTH	DEPTH MLT	BOTTOM WIDTH
OUTER BAR CHANNEL	X	X	47	700
JETTY CHANNEL:				
OUTER END JETTY CHANNEL TO JETTY ENTRANCE	X	X	47 TO 45	700 TO 600
BETWEEN JETTIES	X	X	45	600
INNER BASIN AT HARBOR ISLAND	X	X	45	730 TO 1720
INNER BASIN TO FERRY LANDING AT PORT ARANSAS	X	X	45	600
PORT ARANSAS TO LA QUINTA CHANNEL JUNCTION	X	X	45	500
LAY BERTHS - PORT INGLESIDE	X	X	45	150
LA QUINTA JUNCTION TO CORPUS CHRISTI	X	X	45	400
LA QUINTA CHANNEL	X	X	45	300
LA QUINTA TURNING BASIN	X	X	45	1000X1200
CORPUS CHRISTI TURNING BASIN	X	X	45	800
INDUSTRIAL CANAL	X	X	45	400
AVERY POINT TURNING BASIN	X	X	45	975X1050
TULE LAKE CHANNEL (AVERY POINT TO CHEMICAL TURNING BASIN)	X	X	45	400 MIN.
CHEMICAL TURNING BASIN	X	X	45	1200 DIA.
TULE LAKE CHANNEL (CHEMICAL BASIN TO TULE LAKE BASIN)	(A) 40	200	45	300
TULE LAKE TURNING BASIN	(A) 40	900	45	1000X1200
VIOLA CHANNEL (TULE LAKE BASIN TO VIOLA BASIN)	(B) 40	200	45	300
VIOLA TURNING BASIN	(B) 40	700 TO 900	45	1200 DIA.

X WATERWAY COMPLETED TO AUTHORIZED DIMENSIONS

(A) LEVEE CONSTRUCTION COMPLETED (B) PLANS FOR LEVEES IN SUNTIDE AREA TO BE RELEASED TO CONTRACTOR SOON

DESCRIPTION OF CONSTRUCTION AND MAINTENANCE ACTIVITIES IN PROGRESS

A. DREDGING OF THE 45-FOOT INNER HARBOR PROJECT

1. Recently completed was the deepening and widening of the easterly reach of the Inner Harbor between Mile 21.90 and Mile 26.10. Completion of this contract resulted in about seventy-five (75%) of the Port's commerce being accessible to the 45-foot Channel.

2. A disposal plan acceptable to the Federal Agencies, (although not a 50-year disposal plan as originally proposed for widening, deepening, and maintaining the Inner Harbor) has been finalized and a record of decision made by the Division Engineer and filed with EPA.

3. Soil borings required for the next levee contract, which is planned for FY86 have been obtained. Plans and specifications for this contract (Suntide disposal area) are scheduled to be released to the Contractors for bidding in April, 1986.

4. The next scheduled dredging contract for widening and deepening within the limits of the Inner Harbor is scheduled to extend from the inshore end of the Chemical Basin (Mile 26.10) continuing through the Tule Lake Channel and Tule Lake Turning Basin to Mile 29.30. This contract is scheduled to be awarded in January, 1987.

5. Funds scheduled to be appropriated for maintenance dredging will be used to remove current shoaling from the Tule Lake Channel and Basin and repairing the levee toe in the Rincon disposal area where extensive shoreline erosion is occurring.

TO ACCOMPLISH THIS WORK SCHEDULED BY THE CORPS IN FY87 REQUIRES A CONGRESSIONAL APPROPRIATION OF $7,000,000 WHICH IS ALSO THE CORPS CAPABILITY. THIS AMOUNT IS INCLUDED IN THE PRESIDENT'S BUDGET.

B. OPERATION AND MAINTENANCE OF THE CORPUS CHRISTI SHIP CHANNEL PROJECT

Requested funds in the amount of $2,730,000 will be used to restore the Tule Lake Channel and Basin to its 40 foot depth and to repair the toe of the levees in the Rincon disposal area located North of the Corpus Christi Turning Basin.

TO ASSURE ADEQUATE MAINTENANCE OF THE AUTHORIZED PROJECT DEPTHS, THE AUTHORITY SUPPORTS THE PRESIDENT'S BUDGET RECOMMENDATION OF $2,730,000 FOR FY87 FOR MAINTAINING THE WATERWAY TO PROJECT DIMENSIONS.

TABLE NO. 11
WATERBORNE COMMERCE AND TRAFFIC
CORPUS CHRISTI SHIP CHANNEL PROJECT

	TOTAL WATERBORNE COMMERCE & TRAFFIC (ALL DIVISIONS)			CORPUS CHRISTI WATERBORNE COMMERCE & TRAFFIC EXCLUDING HARBOR ISLAND		
	COMMERCE (SHORT TONS)		TOTAL (2) VESSEL TRAFFIC (ONE WAY ONLY)	COMMERCE (SHORT TONS)		CORPUS CHRISTI TRAFFIC (2) (ONE-WAY ONLY)
YEAR	U.S. CORPS OF ENGINEERS (3)	PORT OF CORPUS CHRISTI		U.S. CORPS OF ENGINEERS	PORT OF CORPUS CHRISTI (1) (2)	
1975	(A) 41,290,771	44,606,135	7606	(A) 35,478,454	37,945,544	5500
1976	43,492,959	48,293,793	7033	39,558,753	43,432,049	4782
1977	56,041,113	60,699,825	(B) 5446	46,732,810	53,705,517	(B) 4761
1978	54,678,296	61,246,725	(B) 6500	46,554,601	54,611,337	(B) 5529
1979	55,597,104	60,846,745	(B) 6991	46,422,792	54,121,877	(B) 6168
1980	45,087,364	53,506,420	(B) 7408	39,107,016	48,802,788	(B) 6822
1981	42,016,730	50,310,474	(B) 6786	39,148,522	47,545,612	(B) 6395
1982	37,993,976	43,152,365	(B) 5832	36,186,072	41,497,550	(B) 5500
1983	(X) 39,131,318	47,200,479	(B) 6374	-	45,363,444	(B) 6100
1984	-	52,067,672	(B) 6942	-	50,035,776	(B) 6630
1985		52,075,393	(B) 6082	-	51,036,612	(B) 5760

(1) Statistical information provided by the Port of Corpus Christi Authority. Port Authority records are maintained slightly different from those of the Corps of Engineers.

(2) Corpus Christi Commerce and Traffic includes the Corpus Christi Inner Harbor, Port Ingleside, La Quinta Channel and the Rincon Industrial Park. Harbor Island Commerce and Traffic is shown separately, but it is also included in the total waterborne commerce handled by the Port.

(3) Certain military cargoes and bunkers moving across the dock are excluded from totals but bunkers loaded on board ships from barges are counted as barge cargo. The Port of Corpus Christi Statistics are based upon actual records taken from the cargo manifests.

(A) From 1973 to 1975 the Bureau of Census failed to report most bauxite ores imported by Reynolds Metal Company.

(B) Beginning in 1977 each barge has been counted separately, but tugs handling the tows are not included in these totals.

(X) For some reason, the waterborne commerce shown appears to be in error.

JUSTIFICATION FOR CONGRESS APPROPRIATING FUNDS RECOMMENDED BY PRESIDENT

According to the latest Corps statistics (1983) the Port of Corpus Christi ranks second in waterborne commerce among Texas Ports and was among the top ten Ports in the Nation in total waterborne commerce. In 1985, Corpus Christi waterborne commerce totalled 52,075,393 tons (PCCA statistics) up from 52,067,672 tons in 1984. This tonnage represents a slight increase after having experienced a steady decline beginning in 1978.

The decline in waterborne commerce at the PORT OF CORPUS CHRISTI during recent years can be attributed primarily to three factors; general worldwide economic conditions, sharp reduction in crude oil imports, and the loss of a major share of grain exports due to an explosion at the Corpus Christi public elevator which resulted in it being out of operation for almost two years. Since returning to service, U.S. grain exports have been far below those of previous years.

CONCLUSIONS:

In 1978 due to worldwide economic conditions and other factors waterborne commerce through the Port began to decline. However, in 1984,Port commerce increased to 52,067,672 tons and increased slightly again in 1985. Past Congressional appropriations for constructing and maintaining the PORT OF CORPUS CHRISTI since it first opened to world commerce in 1926 certainly have been justified. However, Congressional funding must be available as additional improvements are required to improve and maintain the ship channel to accommodate larger vessels and increased traffic.

We are concerned about the impact that Non-Federal O&M fees which are proposed will have on imports and exports thru the PORT OF CORPUS CHRISTI. International trade and world commerce generated by the Port of Corpus Christi clearly indicates that the public interest would best be served if such fees were not assessed against waterborne commerce.

However, if Congress in its wisdom opts to assess Non-Federal O&M fees under the present proposed legislation such fees must be administered fairly and equable, otherwise some ports may be adversely affected by such fees. Of concern to the Port of Corpus Christi is the effect such fees may have on grain exports-whether as a result of these fees grain exports will become non-competitive in world markets.

We are also concerned about the impact that these Non-Federal O&M fees may have on the Port of Corpus Christi since it is a major exporter and importer of ores and minerals. These fees, which are to be deposited in and appropriated from the Inland Waterways and Rivers and Harbors Trust Funds could be significant enough to result in cargoes being diverted from this port to other ports-possibly to ports in another Nation.

Federal expenditures on the 45ft project through FY85 has totalled $32,455,000. Non-Federal expenditures totalled $6,322,000 of which $1,867,000 was a cash contribution and $4,445,000 represented relocation costs.

Estimated Federal expenditures to complete the 45ft. Project is $26,045,000 Non-Federal expenditures of $2,328,000 includes $2,283,000 in cash and $45,000 in relocation costs. These estimated costs also include the construction of additional authorized layberths near Port Ingleside, Texas.

Respectfully submitted,

PORT OF CORPUS CHRISTI AUTHORITY

BY Harry G. Plomarity
Harry G. Plomarity, Executive Director

Mr. **Bevill.** Very good. Thank you very much.

Thank you each for your presentation.

Mr. **Myers.** Thank you.

Mr. **Bevill.** This is an important project, and certainly this committee will consider this very seriously.

Monday, April 14, 1986.

OHIO RIVER NAVIGATION SYSTEM

WITNESSES

THOMAS V. REISHMAN, DEPUTY COMMISSIONER, WEST VIRGINIA DEPARTMENT OF ENERGY

R. BARRY PALMER, EXECUTIVE DIRECTOR, DINAMO/OVIA

EDWARD R. HAMBERGER, LEGISLATIVE COUNSEL TO DINAMO/OVIA, LIPSEN, HAMBERGER, WHITTEN & HAMBERGER

Mr. **Bevill.** Next we have Mr. Barry Palmer of Ohio River Navigation System.

You may come forward and present your statement, and bring with you whomever you wish. Each of your prepared statements will be made a part of the record.

Mr. **Palmer.** Thank you, sir.

Thank you very much, Mr. Chairman and members of the subcommittee, for this opportunity for DINAMO/OVIA to present our remarks and request appropriations for fiscal year 1987.

I have with me this morning Mr. Tom Reishman, who is the Deputy Commissioner of the West Virginia Department of Energy, Mr. Ken Faerber, who is a member of our Executive Committee and Board of Directors; also, Mr. Edward Hamberger, counsel to DINAMO/OVIA.

Mr. **Bevill.** Glad to have each of you with us.

Mr. **Palmer.** As you know, our relations are with major industries, labor organizations, State and local governments, Chambers of Commerce, banks, port authorities and river operators who support our work and our program. We are here to recommend funding for fiscal year 1987 of a number of projects which are a part of our written remarks, and also our oral presentation.

There are two projects in particular that we would like to call your attention to. I have, and would like to have inserted in the record, a copy of a statement of Brigadier General Peter Offina, the Ohio River Division Commander, who indicated the capability at two of those projects, grays landing, otherwise known as lock number 7 on the Monongahela River.

Mr. **Bevill.** Without objection, it will be made part of the record.

[The statement follows:]

DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

DEPARTMENT OF THE ARMY
OHIO RIVER DIVISION CORPS OF ENGINEERS
P O BOX 1159
CINCINNATI, OHIO 45201

13 MAR 1986

Mr. R. Barry Palmer
Executive Director
DINAMO/OVIA
Three Gateway Center
Pittsburgh, Pennsylvania 15222

Dear ~~Mr. Palmer~~: Barry

I refer to your 11 March 1986 telephone request for information on the Fiscal Year 1987 President's budget and approved capabilities for the ORD navigation program. You further requested information on progress to date and future activities scheduled for the Grays Landing project.

I believe the attached table and status report on Grays Landing responds to your request.

Your knowledge of the Ohio River System and support for safe, efficient and cost effective navigation modernization has provided valuable input to our overall navigation program. Please advise if we can be of further assistance.

Sincerely,

Pete

2 Encls

Peter J. Offringa
Brigadier General, U.S. Army
Division Engineer

Appreciate your continued interest

PROPOSED OLMSTED LOCK AND DAM CORPS CAPABILITY FOR LOCKS AND DAMS #52 AND #53 REPLACEMENT

An increase in 1987 funding of $1,000,000 to the capability level of $2,500,000 will be used to advance the study schedule, real estate acquisition and construction by four months.

The funds will be used to complete model studies of the hydrological design of the structure and the design of drum gates. It would also allow completion of the liquifaction and dynamic earthquake analyses in 1987 and to advance the foundation investigations.

The information gained from these investigations will be used to finalize the general design of the project and to complete the General Design Memorandum by September 1988. This in turn will allow the district to begin the Feature Designs four months earlier, to begin real estate acquisition in 1989 and to start construction in 1991.

Status Report - Grays Landing (Mon L&D 7 Replacement)

In January 1986 the Pittsburgh District's General Design Memorandum and Real Estate Feature Design Memorandum were approved for the proposed Grays Landing site. These reports were prepared under the Continuing Planning and Engineering (CP&E) phase of project development.

Subsequent to HQUSACE approval of the CP&E reports, the Pittsburgh District requested authorization and funding to initiate land acquisition for the Grays Landing site. That request was endorsed by the Ohio River Division and forwarded to HQUSACE on 28 Feb 86 for further endorsement to the Assistant Secretary of the Army for Civil Works (ASA/CW) for approval.

Assuming ASA/CW approval, and based on our Gallipolis experience (approval took one month), we could be in position to initiate land acquisition activities this spring. Our current schedule indicates that acquisition of tracts would begin in October 1987 and would be completed in March 1989; assuming, of course, a Spring 1986 approval to begin pre-acquisition work. Following that sequence the first construction contracts for lock and dam features could be awarded about April 1989 if construction authorization has occurred.

CORPS OF ENGINEERS
NAVIGATION FUNDING CAPABILITIES FOR FISCAL YEAR 1987 IN THE OHIO RIVER BASIN

DATE: 13 JANUARY 1986

NAME OF SURVEY OR PROJECT	CATAGORY	CAPABILITY[1/]	PURPOSE OF ADDITIONAL CAPABILITY
Wabash River	Planning	$350,000	Advance Completion of Interim Feasibility Study 2 Months
Olmsted L&D	CP&E	$2,500,000	Advance Study Completion 4 Months
Grays Landing L&D	Construction	$4,200,000	Initiate Real Estate Acquisition

1/ Although project and study capabilities reflect the readiness of the work for accomplishment, they are in competition for available funds and manpower Army-wide. In this context, the Fiscal Year 1987 capability amounts shown consider each project or study by itself without reference to the rest of the program. However, it is emphasized that the total amount proposed for the Army's Civil Works Program in the President's Budget for Fiscal Year 1987 is the appropriate amount consistent with the Administration's assessment of national priorities for Federal investments and Government borrowing is having on the national economy. Therfore, while we could utilize additional funds on individual projects and studies, offsetting reductions would be required in order to maintain our overall bugetary objectives.

FY87 Funding for ORD Navigation Studies

Project/Study	President's FY87 Budget Thousand $	FY87 Funds Utilization
FEASIBILITY STUDIES		
Lower Mon (L&D's 2,3 & 4)	700	Complete Condition Studies, Initiate Draft Report
Ohio River Mainstem	(2,560)	
Upper Ohio (E,D & M L&D's)	810	Continue Condition Studies, Economic and Environmental Evaluations
Lower Ohio (McAlpine L&D)	900	Continue Economic Studies & Environmental Studies
Kanawha River (Marmet L&D)	650	Begin Condition, Economic & Environmental Investigations
Big Sandy River	165	Complete Final Report
Lower Kentucky River	430	Complete Final Report
Wabash River	200	Complete Recon Study, Initiate Feasibility Study if Warranted
Cumberland/Tennessee	(1,450)	
Upper Cumb./Tenn	760	Continue Navigation system evaluations
Lower Cumberland	140	Complete Final Report
CONTINUED PLANNING AND ENGINEERING		
Olmsted L&D	1,500	Continue site mapping, foundation investigations & hydraulic modeling
CONSTRUCTION (DESIGN & REAL ESTATE ACQUISITION)		
Winfield L&D	1,750	Prepare General Design Memorandom
Grays Landing L&D	670	Complete L&D Design & Relocation Feature Design Memos
Point Marion L&D	730	Complete the General Design Memo and Initiate Feature Designs
Gallipolis L&D	3,500	Continue Real Estate Acquisition and Engineering Design
TOTAL	12,905	

Mr. **Palmer**. And for Locks and Dams 52 and 53 on the Ohio.

The Corps' capability exceeds the amount of money in the President's budget. We would like your careful consideration of those additional funds in those two areas.

I would like to at this time to turn our remarks over to Mr. Reishman.

[The statement of Mr. Palmer follows:]

ORAL TESTIMONY

Presented by:

Kenneth R. Faerber
Commissioner
West Virginia Department of Energy
Charleston, West Virginia

Presented to:

House Appropriations Subcommittee on Energy
and Water Development

Date Submitted:

April 14, 1986

Mr. Chairman and Members of the Subcommittee:

My name is Kenneth Faerber and I am the Commissioner of the West Virginia Department of Energy and a Vice Chairman of the Board of DINAMO/OVIA - the Association for the Development of Interstate Navigability in America's Ohio Valley. This Association is dedicated to the development and more effective use of the navigation system of the Ohio River and its connecting waterways. Our membership includes major industries, labor organizations, state and local government, chambers of commerce, banks, port authorities, and river operators who support our work and program.

We are here today to recommend funding in Fiscal Year 1987 of the following projects. Our recommendations for general investigations, continued planning and engineering, and construction of lock and dam projects on the Ohio River navigation system are in harmony with balanced budget objectives now and in the future. Except where noted, these requests are identical to those values found in the President's budget:

(1) For the Gallipolis Modernization Project on the Ohio River - $3,500,000 to complete advanced engineering and design and for real estate acquisition.

(2) For Gray's Landing, otherwise known as Lock Number 7 on the Monongahela River, $4,200,000 for completion of advanced engineering and design and to proceed with real estate acquisition. The President's budget includes on $670,000 for this vital project.

(3) For Point Marion, otherwise known as Lock Number 8 on the Monongahela River, $730,000 for engineering and design of the facility.

(4) For the Winfield Lock and Dam on the Kanawha River, $1,750,000 for engineering and design of the facility.

(5) For Locks and Dams Numbers 52 and 53 on the Ohio River, otherwise known as the Olmsted Lock and Dam Project, $2,500,000 for advanced engineering and design work. The President's budget includes $1,500,000 for this work.

(6) For the Ohio River Main Stem Study, which includes Emsworth, Dashields, Montgomery Island and McAlpine Locks and Dams - $1,710,000 for General Investigation.

(7) For the Cumberland and Tennessee Rivers - $1,450,000 for General investigation.

(8) For Locks and Dams Numbers 2, 3, and 4 on the Monongahela River - $700,000 for General Investigation.

(9) For the Marmet Locks on the Kanawha River - $650,000 for General Investigation.

We are keenly aware of the urgency of budgetary restraint in Fiscal Year 1987 as well as the objective of balancing the Federal budget by Fiscal Year 1991. In fact, construction funding on America's inland navigation system has been in a budget crisis since the seventies.

For example, in dollars of 1985 purchasing power, Federal expenditures for inland navigation new construction fell from an average of $505 million per year in the years 1971 through 1975 to $384 million per year in the years 1981 through 1985. This is a 24 percent reduction in real dollar expenditures.

The projects outlined previously are a part of DINAMO/OVIA's long-range recommendations. These recommendations are based on information drawn from the National Waterways Study. That study identified 41 locks and dams which will need to be replaced or require major rehabilitation. In today's dollars, the cost of the program is $6.7 billion. Over a thirty year time-frame, the average annual cost to replace or rehabilitate these 41 locks and dams would be $223 million. This amount is 55 percent less than the $305 million per year average annual expenditures from 1971 to 1975 and 42% less than the $384 million per year than we are spending today.

It is believed that a substantial portion, perhaps as much as one-half, of this annual expenditure of $223 million will not come from general revenues but from the private sector taxes, or user fees, accumulating in the Inland Waterways Trust Fund. The Federal Treasury's share of this long-term program would be only $111.5 million per year. This amount is a 71 percent reduction from the 1981-1985 annual average expenditure of $384 million.

There has been a myth expressed that the industries making the most use of the inland waterways are now in decline and that there is no longer any need for the same level of waterway improvement and maintenance as in the past. This is a seriously false impression and it is important that we correct it.

Ohio Valley industries such as coal mining, steel, chemicals, oil refining, electric power generation, and farming are among the heaviest users of the inland navigation system. They are now at a critical juncture in their development. Some have been depressed and, in recent years, most have been severely challenged by foreign competition. While current developments offers high promise of future recovery, an adequate transportation base will be crucial to the realization of these industries' long-term success.

The DINAMO/OVIA analysis of the long-term outlook is included in our written testimony. In that analysis, we looked at six key industries which substantially use the waterways - coal, steel, chemicals, petroleum and petroleum products, chemicals, and agriculture. In each case, all the signs point to a future with expansion, growth and a continued reliance on low-cost water transportation. I would like to briefly outline the prospects for these industries.

COAL - Robert R. Nathan and Associates, under contract to the Corps of Engineers, projects coal movements on the Ohio River System in the year 2000 at 204.2 million tons, about double the 1983 tonnage. The National Coal Association assumes, less optimistically, that by the year 2000 about 157.3 million tons will move on the Ohio System. Even the lower estimate will mean about 18,000 more jobs and $2.0 billion in increased earning for the Ohio Valley.

ELECTRIC ENERGY - Utilities are the largest users of coal in the region. Waterborne coal is delivered to Ohio Valley utilities at a fraction of the cost per kilowatt-hour of competitive modes. This is a tremendous stimulus to business investment as well as an advantage to homeowners. The average residential customer of American Electric Power, the Ohio Valley's largest investor-owned utility, paid 20% less per kilowatt-hour than the industry average.

In addition, these benefits extend far beyond the Ohio Valley. System inter-connections allow the Ohio Valley power stations to provide back-up capacity for cities like Detroit and New York.

STEEL - The Ohio Valley steel industry is still the second largest consumer of waterborne coal in our region. Virtually all of the metallurgical coal consumed in the Pittsburgh District, which is still the single largest steel producing region in the nation, is waterborne. The cost advantage of this waterborne coal is essential to the future of steel-making in the Ohio Valley.

The Ohio Valley reduced its steelmaking output from 23.8 percent to 18.9 percent of the nation's total production in the 1971 to 1975 versus 1981 to 1985 periods, respectively. By reducing its capacity through the closing of obsolete mills, lowering production costs and improving worker productivity, steelmakers in the Ohio Valley are positioning themselves for the future. From 1983, which was the low point for steel in the recent recession, to 1984, Ohio Valley steel production rose 17.8 percent compared to a nationwide average growth of 10.8 percent. Future growth of our region's steel industry is dependent on adequate supplies of metallurgical coal delivered by water.

PETROLEUM AND PETROLEUM PRODUCTS - In addition to the refineries in the Ohio Valley, consumers in the region benefit by the waterborne movement of these commodities. Gasoline and diesel fuel amounting to over 1 billion gallons are delivered to the Ohio Valley each year. Over 28.7 million barrels of fuel oil were delivered in 1983. It is important to note that these products cannot be delivered by pipeline. Neither can the

4.8 million tons of lubricating oils, greases, asphalt, tar, pitch, and petroleum coke moved in 1983. Most significant is that much of these products are delivered to smaller communities that cannot be economically served by pipeline.

CHEMICALS - The chemical industry is one of the most versatile and diverse industries in America. In 1983, during the recession, over 10.6 million tons of chemical were transported on the Ohio System. this traffic support 29,000 jobs and $455 million in payroll. The Nathan study predicts a doubling of traffic to 22.4 million tons by the year 2000 with a similar effect on jobs and earnings.

AGRICULTURE - In 1983, 328.5 million bushels of corn, wheat, and soybeans alone were shipped on the Ohio River System. These crops had a value of $1.6 billion. Agricultural shipments on the Ohio System grew at 38.5 percent from 1978 to 1983 versus 33 percent for the rest of the navigation system. As farm debts are reduced, technologies advance, and overvaluations are corrected, America's farm output can only increase. Our farm belt will resume its role as breadbasket to the world.

The Ohio Valley has not yet fully participated in America's economic recovery. We are a region in an economic transition. Industries will change and companies will be affected differently. The constant factor is the river. It has provided, and will continue to provide, the opportunities for economic growth and prosperity for our people and our nation.

In conclusion, the DINAMO/OVIA proposal is in concert with Congressional efforts to control spending, enhance the government's revenue base, and provide opportunities for private sector growth in the future. We thank you for your patience and support.

Mr. Reishman. Thank you, Mr. Chairman, for giving us the opportunity to make our remarks here this morning.

The eight interconnected waterways or rivers which comprise the Ohio Valley waterway system make up 2,582 miles. This represents 10 percent of the inland waterway system. However, this 10 percent is responsible for over 35 percent of the nation's inland waterway commerce.

By and large, this system is extremely well-maintained and allows for the efficient transport of bulk commodities. There are a few bottlenecks in this system, however, and that enables the efficient throughput of commodities over long distances.

The particular system services a lot of heavy bulk commodity industries within the area; coal, steel, chemicals are the primary ones. I would like to address those industries particularly and, to some extent, address what the significance of those industries are for the entire area and the West Virginia State, as well.

Waterborne commerce basically is responsible for moving practically one-third of all the coal produced in West Virginia, Pennsylvania, Ohio and Kentucky. Coal represents over 100 million tons of commodity flow on this river system per year. It represents the largest commodity served by this river system.

There are presently 33,000 coal miners which produce coal, which is moved exclusively by waterway. This 33,000 number, as far as the presence of miners, is a significant number. That also happens to be the number of coal miners working in the State of West Virginia.

Recently, we have heard that the coal industry, steel industry and chemical industries are on the decline nationwide and especially in this particular region, often identified as the antiquated rust belt area. We take particular offense to that. Although the West Virginia coal industry presently employs 33,000 miners, only 10 years ago we employed 62,000 miners, a dramatic drop.

What is misleading in those numbers is that West Virginia produces 20 million more tons of coal today than we did 10 years ago. Our coal production is the highest level it has been in over 15 years.

I think it is important to realize that coal and steel have been very, very depressed in the last several years. However, what we have now is an industry that is much stronger, much more competitive and able to compete domestically as well as overseas.

The 130 million tons of coal which West Virginia mines now is much more competitive and we are in a position to increase the amount of coal we supply domestically as well as overseas.

West Virginia coal is supplied to over 25 states in the Union as well as the Washington area.

I think it is important to realize that any cost savings which occur to the coal industry and shipping industry is not internalized to a single state but transfers to the entire region. Certainly with 25 states receiving coal from this particular state, it is easy to see how those benefits are shared.

River transportation of coal and other bulk commodities is important because it is the only check and balance which exists on the ever-increasing railway option. Much of our coal is shipped by rail now, increasingly under long-term arrangements which require unit train loading. Independent and medium-size companies unable to equip their facilities for massive unit train loading facilities often have to turn to barge and river transportation companies for the shipment of their coal.

Without the improved facilities in this area, coal shipments are going to be severely constrained. Already we have had time lags which are unacceptable which prevent the efficient shipping of our coal resources.

The second largest commodity which is transported on the river system is steel. Pittsburgh and northern West Virginia area have long been a hub for the steel producing industries in this area. Weirton Steel, a company now representing the largest employee stock ownership company in the U.S., has roughly 9000 employees. Those employees several years ago took a 20 percent pay cut in order to purchase the company. Since that time they have reported 8 consecutive quarters of record-making profits.

I think it is important to realize that even as depressed as the steel industry is, there are shining examples of companies and individuals ready to invest in the future.

Weirton Steel would certainly be improved from a competitive aspect if the loading dock which they currently have on the Ohio River was connected to a more efficient interstate navigable waterway.

I think it is also important to realize that the many mills which are often a major development item here as far as the steel industry, it is important to realize that your basic integrated steel mill is still going to be a necessary development option for the future, that many mills do not in many cases provide the product diversity or the capability to produce in time of national security as a large integrated steel mill in the Pittsburgh area has.

I think it is important to realize that the chemical industry represents a major commodity flow in the Kanawha Valley as well. Unlike coal and steel, these are basically incoming commodities refined into finished goods and shipped elsewhere.

So I think that is important to realize as an example of not only the outflow of raw materials and natural resources, but also the inflow of petrochemical products for other markets.

Electricity represents really the one single market where most of this coal is shipped. West Virginia, Ohio and Pennsylvania have a lot of generating units along the river system. I think the advantage of that is basically that this power is not consumed in those states. West Virginia, for example, exports over 80 percent of the electric power which we generate.

To that extent, there are other states which benefit from this electric power and the reduced cost.

The Ohio Valley has yet to enjoy some of the economic benefits which the rest of the country has enjoyed in the last couple years. The river is a mainstay to our economic well-being and with the help of this committee additional monies should be dedicated and remodernizing of these particular locks and dams needs to be a primary concern.

Thank you for your time and patience.

[The statement of Mr. Reishman follows:]

DINAMO/OVIA
Three Gateway Center Pittsburgh, PA 15222 (412) 392-4550

TESTIMONY

Presented by:

Kenneth R. Faerber
Commissioner
West Virginia Department of Energy
Charleston, West Virginia

Prepared for:

ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE
of the
HOUSE OF REPRESENTATIVES APPROPRIATIONS COMMITTEE

Submitted by:

DINAMO/OVIA
The Association for the Development of Interstate Navigability
in America's Ohio Valley
Three Gateway Center
Pittsburgh, Pennsylvania 15222
(412) 392-4550

Date Submitted:

April 14, 1986

Mr. Chairman and Members of the Subcommittee:

My name is Kenneth R. Faerber. I am the Commissioner of the West Virginia Department of Energy in Charleston, West Virginia and a member of the Executive Committee of the Board of Directors of DINAMO/OVIA - the Association for the Development of Interstate Navigability in America's Ohio Valley. This Association, headquartered in Pittsburgh, Pennsylvania, is dedicated to the development and more effective use of the navigation system of the Ohio River and its connecting waterways. Our membership includes major industries, labor organizations, state and local governments, chambers of commerce, banks, port authorities, river operators, and individual citizens who support our work and program.

I. THE OHIO RIVER SYSTEM - MAGNITUDE, EXTENT AND MODERNIZATION PROGRAM

The Valley of the Ohio River and its navigable tributaries lie within nine states, principally in the East North Central Region.[1] The eastern portion is entirely within Appalachia. The Valley encompasses such riverside metropolitan areas as Pittsburgh, Charleston and Huntington, West Virginia, Cincinnati, Louisville, Evansville, Nashville, and Guntersville, Alabama, in addition to numerous other waterway ports.

The eight interconnecting rivers of the Ohio Valley comprise a navigable system of 2,582 miles. This is about 10 percent of all the inland waterways of the United States. But, in the latest year reported (1983), this 10 percent carried 35 percent of the nation's inland waterborne tonnage. Through its direct connections with the Mississippi and its tributaries and with the Tennessee-Tombigbee Waterway, the river system connects the Valley's industries with sources and markets throughout the Mississippi Basin and the Gulf Coast. In 1983, the Ohio River System carried 171.2 million tons of freight, nearly three-fold the tonnage which transitted the St. Lawrence Seaway that year, U.S. and Canadian combined, and 48.6 percent of the total inland tonnage carried on the entire Mississippi River System.

The Problem of Deteriorated and Obsolete Navigation Structures

Modernization of the Ohio River System is lagging seriously. The System is equipped with 61 federally-built and maintained lock and dam structures. Modern vessel operation is highly competitive and technologically advanced, and most of these structures are fully compatible with this technology. The system is hampered, however, by a few antiquated bottlenecks, some in an advanced state of deterioration. It is critical to the future of this extensive sector of the American economy that these bottlenecks be relieved as promptly as orderly and economical procedures will permit.

It is also important to private investment in shipping and receiving industries that work on bottleneck relief proceed with reasonable adherence to programmed schedules. Investment in mines and factories is keenly sensitive to the outlook for long-term influences on cost and market access, and unpredictable delays in bringing the waterway system up to fully modern standards introduce a major element of cost uncertainty adverse to the long-term commitment of private capital.

The particular projects for which we recommend funding in Fiscal 1987 are presented as follows:

Recommended Projects

		Fiscal 1987	
		President's Budget	DINAMO/OVIA Recommendation
(1) Ohio River, Gallipolis Modification Project	Complete advanced engineering & design & real estate acquisition estate acquisition	$3,500,000	$3,500,000
(2) Monongahela River, Gray's Landing (Lock #7)	Complete advanced engineering & design; proceed with real estate acquisition	$ 670,000	$4,200,000
(3) Monongahela River, Point Marion (Lock #8)	Engineering & design	$ 730,000	$ 730,000
(4) Kanawha River, Winfield Lock & Dam	Engineering & design	$1,750,000	$1,750,000
(5) Ohio River, Olmsted Lock & Dam (replacing L/D #52 & #53)	Advanced engineering & design	$1,500,000	$2,500,000
General Investigations			
(1) Ohio River, Emsworth, Dashields & Montgomery Island Locks and Dams		$ 810,000	$ 810,000
(2) Ohio River, McAlpine		$ 900,000	$ 900,000

		(3)
(3) Cumberland-Tennessee Rivers (River bends on Cumberland & Kentucky Lock on Tennessee River)	$1,450,000*	$1,450,000*
(4) Monongahela River, Locks and Dams #2, #3 & #4	$ 700,000	$ 700,000
(5) Kanawha River, Marmet Locks	$ 650,000	$ 650,000

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*Of the $1,450,000 million recommended for the Cumberland and Tennessee Rivers, only $900,000 is for navigation.

II. MAJOR INDUSTRIES OF THE OHIO VALLEY - OUTLOOK AND WATERWAY IMPACT

Concern has been expressed that the industries making the most use of the inland waterways are now in decline and that supposedly, therefore, there is no longer any need for the same level of waterway improvement and maintenance as in the past. This is a seriously false impression, and it is important the we correct it.

In the Ohio Valley, such industries include coal mining, steel, chemicals, oil refining, electric power, and farming. They are now at a critical juncture in their development. Some have been depressed and, in recent years, most have been severely challenged by international competition. But, current development offers high promise of future recovery, and an adequate transportation base will be crucial to realization of this promise.

Waterways Development for the Long Term

Waterway improvements are built for the long term, whereas the current problems of the valley industries are mainly either short-term or medium-term. Their long-term outlook is favorable. The immediate outlook for steel, coal, chemicals, oil refining, or farming has little relevance to a waterway project which cannot be brought into service before 1993, and is designed to serve thereafter for 50 years. Our recommendations, therefore, look ahead well into the Twenty-First Century.

We may learn from past experience in this regard. In the 1930's, the nation's economic outlook was one of indefinite stagnation. Distinguished American economists and civic leaders proclaimed the arrival of the "mature economy". Growth, they asserted, had ended with the disappearance of the frontier. Projections made in 1935 looked forward to a total 1980 population of about 150 million. (Actually it was 227.7

million.) GNP expectations contemplated, at best, a return to the levels of the late 1920's.

In the face of this discouraging outlook, the Federal Government carried forward the most massive improvement on the inland waterways in history, completing the canalization of the Upper Mississippi, the Illinois, and the Tennessee Rivers, further improving the Ohio, and extending the Gulf Intracoastal Waterway. After World War II, expansion of the water-based industries and their waterborne traffic soared beyond the wildest dreams of the stagnation theorists. As an example, canalization of the Upper Mississippi was authorized in 1930 on a traffic expectation of 9.0 million tons per year. In 1983, in spite of the recession, the Upper Mississippi actually carried 84.1 million tons. Likewise, in 1986, America's waterways should be brought up to a standard geared to the long-term and suitable as an infrastructure to sustain massive economic growth into the middle of the Twenty-First Century.

Bituminous Coal

The largest waterborne commodity movement on the Ohio River System is bituminous coal. In 1983 (the latest year reported), it amounted to 100.7 million tons, equal to 13.0 percent of all the coal produced in the United States and close to one-third of the total mined in Kentucky, Ohio, West Virginia and western Pennsylvania, combined.

The outlook for waterborne coal is one of substantial growth. An in-depth study by Robert R. Nathan Associates, under contract with the Army Corps of Engineers, projects coal movement on the Ohio River System in the year 2000 at 204.2 million tons, about double the 1983 tonnage. Less optimistic projections made in 1986 by the National Coal Association indicate for the year 2000 about 157.3 million tons.[2]

The waterborne coal on the Ohio River System in 1983 had a mine value of about $3.3 billion and represented the employment of 33,300 miners.[3] Taking the more modest tonnage projection of the National Coal Association, the movement in the year 2000 would have a mine value of $5.2 billion, principally income to the region. At the same output per miner as in 1983, the year 2000 movement would provide 52,000 mining jobs, an increase of 18,700 over 1983.

These projections, of course, are subject to unpredictable changes in coal prices and in worker productivity. Yet, it remains obvious that, in the Appalachian coal mining industry, somewhere in the neighborhood of $2.0 billion of increased income and close to 18,000 more jobs are at stake in an adequate and efficient navigation system on the Ohio and its tributaries.

Lest it appear that these projections are too optimistic, the National Coal Association based them on the very modest expectation of an average increase in output from 1984 to 1990 of only 1.4 percent yearly and, from 1990 to 2000, of 2.3 percent. In early 1986, coal mining is constrained by the extreme slump in competitive fuel oil prices, a temporary circumstance. Meanwhile, the decline in the value of the dollar internationally offers promise of renewal in the growth of exports.

Increasing utilization of coal is clearly in the national interest. A reliable supply of energy is vital both to the U.S. economy and to national security. Continued economic growth in the long term will mean a rising demand for energy. Domestic sources of oil and gas involve ever-higher investment and rising costs as exploration moves into less accessible reaches of the oceans and inhospitable regions of the planet. The alternative of a substantial and growing reliance on oil imports would subject the nation's energy supply to the unpredictable actions of foreign governments, particularly in the volatile Middle East, and the roller-coaster gyrations in price these influences exert could prove highly disruptive to the U.S. economy.

As for national security, foreign sources are conspicuously unreliable, and domestic oil fields on the continental shelf and in the Arctic are highly vulnerable to military attack. In contrast, domestic coal reserves are adequate for centuries, supply is stable, and the producing regions lie in the continental interior.

A modernized and efficient navigation system on the Ohio River and its tributaries will also serve as a wholesome check on railroad rates. With recent and continuing mergers of large railroad companies, interline railroad competition progressively declines. Substantial deregulation of rate-making, particularly on coal, further invites excessive rail charges.

By contrast, commercial navigation on the inland rivers is intensely competitive, and a fully modernized and efficient navigation system will exercise a wholesome restraint on competitive railroad rates. Coal movements to Gulf Coast consumers are directly affected; coal exports even more so. Barge movements of Ohio Basin coal for export via Gulf ports compete with rail shipments, not only via the Gulf, but, as well, via the Atlantic coastal ports.

Coal has a reputation as a dirty fuel. But, it is cleaning up. Large reserves of Ohio Basin coal are low in sulphur content. Progress in the technology of coal preparation and combustion offers rising promise of non-polluting stack emissions, even with higher-sulphur coals.

On November 7, 1985, the voters of Ohio approved a state constitutional amendment authorizing issuance of state "Coal Research and Development Bonds" in an amount up to $100 million for this purpose, and in early 1986 the State Legislature enacted legislation to implement this program. The probability is thus very high that by the end of the century all Ohio Basin coals will rank high in their contribution to clean air objectives.

Electric Energy

The largest portion of the coal carried on the Ohio River and its tributaries moves to riverside electric utility stations. The delivered cost of waterborne coal at these stations is only a fraction of the average fuel cost per kilowatt-hour nationwide, a cost advantage conducive to lower rates for homes, farms, municipalities, and industries, and a consequent stimulus to commercial and industrial development and employment. The largest investor-owned electric utility serving the Ohio Valley (American Electric Power) notes:

> "The AEP System's average residential customer in 1983 used about 20% more electricity - but paid about 20% less for it (i.e. per KWH) - than his counterpart for the investor-owned utility industry as a whole."[4]

The benefits of low-cost electric energy extend hundred of miles inland from the riverside stations. High voltage transmission lines provided electricity for such inland cities as Canton, Dayton, and Columbus, and through system interconnections, have provided backup energy to avert power shortages in such cities as New York and Detroit.

Steel

The second largest consumer of waterborne coal is the Ohio Valley steel industry. The availability of metallurgical coal of high quality, moved from riverside mines via the Monongahela River, has long been the principal cost advantage of the Pittsburgh District, the largest steel-producing district in the Valley With changing technology, coal originating by rail in southern West Virginia and eastern Kentucky, and transferred to barges in the Huntington area for carriage upstream on the Ohio, has come to play a large role in low-cost fuel in the Pittsburgh District and the Upper Ohio Valley. Virtually all the metallurgical coal consumed in the Pittsburgh District is waterborne.

The improvements we recommend on the Upper Ohio and the Monongahela River are obviously of critical importance to this coal supply. They are of comparable importance to movement of ferrous materials and finished steel. In 1983 (the latest year reported), the Ohio River System carried 3.4 million tons of iron ore, pig iron, ferrous scrap, and steel products. Of this total, 2.3 million tons (67.6 percent) consisted of steel products and ferroalloys, principally of Ohio Valley origin. The steel products alone had a mill value exceeding $504 million, and their production generated employee income of some $230 million. The steel industry is a major purchaser of materials, supplies, and services from local enterprises. The steel shipped on the Ohio River System in 1983 represented expenditures of about $380 million for this purpose, much of it revenue to a wide variety of establishments in the Ohio Valley.[5]

While the integrated sector of the steel industry has undergone reverses in recent years, its long-term outlook appears favorable. Robert R. Nathan Associates project that in the year 2000 the Ohio River System will carry about 9.4 million tons of ferrous materials and products and in 2020 14.3 million tons. The Nathan findings are based on projected growth in steel demand in every BEA region in the Ohio Basin and make full allowance for a large growth to be carried by rail and truck.

Signs of a turnaround in the domestic steel industry are already at hand. With retirement of less efficient works, rising productivity, and the return of the dollar to a more normal relationship to foreign currencies, steel imports are declining while domestic demand holds strong. American steel is becoming more price competitive. Peter Marcus, a steel analyst for Paine Webber, Inc. is quoted as follows:

> "The list price for major steel purchasers in Japan is $425 a ton for hot rolled sheet, used to make autos, while the U.S. price is now about $100 a ton less."[6]

Most Ohio Valley steel is produced in the Pittsburgh District. Capacity reduction in the district is an indication of future strength. During the five years, 1971-1975, the Ohio Valley produced 23.8 percent of the nation's steel output; from 1981 to 1985, this was down to 18.9 percent. In the past, the Pittsburgh District has been handicapped by an excess of capacity over regional demand and was compelled to absorb freight by shipping steel to distant markets served more cheaply by competitive mills. Its reduced capacity now gives it a better balance between capacity and demand in the nearby consuming areas where it has a natural advantage on cost and service. From 1983 to 1984, while steel production nationwide increased by 10.4 percent, that in the Ohio Valley went up 17.8 percent. Allegheny Ludlum, headquartered in Pittsburgh, had record sales in 1984 and earned an impressive 18.0 percent on capital.

In 1983, in Weirton, West Virginia, on the Ohio River, 9,500 steelworkers agreed to trade off 20 percent of their pay for a chance at profits by buying the huge Weirton steel plant from National Intergroup, Inc. With costs thereby reduced and with a sterling reputation for a superior product, investment bankers and consulting agencies give these workers a good chance of success in spite of incursions by alternative materials into the market for their main product (tin plate). This is the largest employee-owned industrial plant in the nation, and probably in the world, and a modernized waterway at the plant loading docks will be one more step toward assuring the success of the workers' venture.

The maintenance of a large and healthy integrated steel industry in the United States, utilizing ores and fuels internal to the continent, is absolutely essential to national security. Steel is the principal material for the production of warships, artillery, small arms, tanks and the immense fleets of motor vehicles required by the armed forces. An industry of mini-mills will not suffice. Mini-mills are too reliant on uncertain supplies of ferrous scrap and too limited in product versatility. Without a large and efficient integrated steel industry, the United States, in its military posture, would be fundamentally disarmed.

The advancement of these values is deeply involved in the program for modernization of the Ohio River navigation system.

Gasoline, Fuel Oil, and Other Petroleum Products

The shipment of petroleum products on the Ohio River and its tributaries is of importance not only to the region's refining industry but, fully as much, to consumers. Gasoline and diesel fuel are major components of this traffic. In 1983, the gasoline delivered by river barges in the Lower Ohio Basin alone amounted to 1.15 billion gallons, serving motorists, farmers, and truckers in Tennessee, Kentucky, and the states on the north bank of the Ohio. As a measure of magnitude, this was equal to 66.6 percent of all the gasoline consumed in the Commonwealth of Kentucky that year. The waterborne gasoline delivered on the Upper Ohio and the Kanawha Rivers was equal to 41.9 percent of all the consumption of the State of West Virginia. The fuel oil received on the Ohio River System in 1983, including diesel fuel, amounted to over 28.7 million barrels.

It should be noted that pipeline movement is not a suitable alternative. Residual fuel oil cannot move by pipeline under ordinary conditions. Neither can such petroleum products as lubricating oils and greases, asphalt, tar, pitches, or petroleum coke. The Ohio River System carried 4.8 million tons of these products in 1983.

With respect to all petroleum products, river barges provide service to small communities and possess a seasonal flexibility that pipelines lack. Many independent marketers and distributors are too small for pipeline participation. River barging has often been called "the poor man's pipeline". These smaller operators maintain a healthy competitive influence in consumer markets, contributing substantially to lower prices.

An abundance of low-cost motor fuel is of distinctive importance in the Appalachian area. The tourist industry there is a major source of income, and low gasoline prices are a significant attraction. The region likewise looks to continued development of light manufacturers highly reliant on trucking, for which low-cost gasoline and diesel fuel are of great importance.

Waterborne delivery of petroleum products in the Upper Ohio Basin, particularly in western Pennsylvania, contributes significantly to an improved balance of payments. In this area, Ohio Valley refineries and marketers are in direct competition with products received by pipeline from the Atlantic Coast, and their low-cost access to this market restrains the importation via Atlantic ports of products from offshore and foreign refineries. This is of special significance because petroleum products are considerably higher-priced than crude oil. In addition, the products of coastal refineries are more usually derived from imported crude than is true in the Ohio Valley. A fully modernized river system will reinforce the competitive strength of domestic production in the region.

Chemicals

Because of its incomparable versatility, the chemicals industry is of great importance both to the American standard of living and to most other U.S. industries. An enumeration of some of its products only begin to suggest their great variety. These included medicines, food and drug wrappings, synthetic fibers, numerous building materials, automotive and machine parts, adhesives, paint pigments, bleaches, solvents, acids, detergents, and coatings. A complete list would occupy a book. Americans eat, wear and dwell in products of the chemicals industry and their derivatives.

The Ohio River Valley is a major center of this industry, and waterborne carriage is critical to its operations. Even in the recession year of 1983 (the latest reported), the Ohio River and its tributaries carried over 10.6 millon tons of chemicals, sustaining about 29,000 chemicals jobs and some $455 million of payrolls in the region.[7] The Nathan report, previously cited, projects a growth to 22.4 million tons in the year 2000, signaling an approximate doubling of the jobs and payrolls sustained by this movement.

Most of the waterborne chemicals are inbound to the Ohio Valley, and about one-third of the inbound movement consists of farm fertilizers. The remainder are principally crude feedstocks and intermediates for further processing into finished products. Most come long distances. In 1983, 72.5 percent of the inbound receipts came from Gulf Coast origins via the Mississippi, representing to a large degree a logistical tie-in with Gulf Coast oil refining.

Much of the Ohio Valley chemicals industry is thus a finished products industry, its highly-varied output of consumer and industrial necessities distributed, mainly by rail and truck, throughout the Northeast Quadrant of the United States. Sharing its riverbank location with chemicals-consuming industries of the Ohio Valley, its products are important to their low cost and efficiency and thereby to the health of much of the valley economy.

It is clear that a modernized and efficient waterway system is critical, not only to the long-term outlook for jobs and incomes in the chemicals industry, but, as well, to the efficiency of other valley industries, to sustained revenues of Gulf Coast refining, and to an abundance of products at low cost in consumer markets throughout the Northeast.

Agriculture

Waterborne commerce on the Ohio River System is a major contributor to lower farm costs and to farm income, not only in the Ohio Basin, but in the Upper Mississippi and Illinois River Basins as well. We have already noted the low cost of electricity produced from waterborne coal in the Ohio Valley. This is especially important to farmers. Farm operations require a great deal of illumination of barns and other structures as well as of outdoor working areas. A good deal of stationary farm machinery is powered by electricity. In 1983, according to the U.S. Department of Agriculture, the average farm in the four principal farm states of the Ohio Basin consumed 1,185 kwh per month.[8] The region's largest electric utility (the American Electric Power Company, Inc.) reports average residential use that year, urban and rural combined, of only 842 kwh monthly.

The low cost of waterborne motor fuel is likewise critical to farmers. Most farm cultivation consists of continuous operation of tractors and trucks. Considering the many hours of tractor operation per day in the field, the average farmer consumes annually several-fold the quantity of motor fuel as the urban dweller. We have already pointed out the large tonnage of farm fertilizers delivered into the Ohio Valley by river barges.

But, more important even than these, the waterborne shipment of farm crops is a big contributor to farm income. Taking the principal corps alone (corn, wheat, and soybeans), in 1983, over 328.5 million bushels were shipped via the Ohio River. Their farm value was over $1.6 billion.[9] Over 24 percent of these crops consisted of shipments from the Upper Mississippi and Illinois Rivers to upstream Ohio and Tennessee River destinations. The remainder consisted of the products of Ohio Basin farms, mainly in Indiana, Kentucky, and Ohio, principally to the Gulf Coast for export.

Because of the very long distances of movement, reduced transportation costs give a big lift to income realized at the farm. As an example, the river distance from Davenport, Iowa, to Guntersville, Alabama, is 887 miles. From Evansville, Indiana, to New Orleans, it is 1,163 miles. Virtually every farmer in the affected regions benefits from the low cost of these movements. For example, according to data from the U.S. Department of Agriculture, the downbound corn movement on the Ohio River in 1983 was equivalent to the output of 31,724 Indiana farms and represented a sales value of about $14,000 per farm. Wheat, soybeans, and other crops could be added to this.

We cite this equivalence only to indicate magnitude. Actually the benefits are not confined to any particular number of privileged farmers, but are widely distributed to virtually every farm in the affected regions. For one thing, country elevators as far 80 to 100 miles from the rivers originate shipments by rail and truck for transfer to barges for the long haul to ultimate destinations. Furthermore, barge competition has induced most of the midwest and southern railroads to institute water-competitive rates on all-rail movements to the Southeast and the Gulf Coast. These rates, however, are normally contingent on 50-car to 100-car shipments, quantities too large for the numerous small country elevators in the farm regions, which are therefore dependent on low-cost truck-barge service. Many of these elevators do not even have rail connections.

American grain farming is now suffering its greatest hardships since the Great Depression. For many, the large number of farm foreclosures is a story of personal tragedy. But, for the long term, a new chapter will be written. As past overvaluations are corrected, debts based on these scaled down, and advancing technologies applied in the fields, the bread basket of America's interior almost surely will resume its role as the major supplier to a hungry world. The reduced value of the dollar internationally is already a favorable influence.

The participation of Ohio Basin farming in the waterborne movement has been growing. During the five years ending with 1983, the farm corps carried on the Ohio River System increased by 38.5 percent; on other rivers in the country only 33.0

percent. The new Tennessee-Tombigbee connection to the Gulf enhances the Basin's position, and our recommended improvements, particularly at the Olmsted site and on the Tennessee River, will carry forward the favorable prospects for Ohio Basin farming.

Other Industries and Commodities

I have given special attention to the preceding six industries because they are the largest shippers and receivers on the system. But, commercial navigation on the Ohio and its tributaries serves many others. The Corps of Engineers lists 95 commodity groups carried on these rivers.

Building materials, especially aggregates, cement, and limestone, are of great value, notably to local road and street maintenance, and thus to local government finances. The Ohio River Systems carries many thousands of tons of pulpwood, pulp, and newsprint. Non-ferrous ores, metals, and alloys are an important element in river commerce. I have given attention to farm crops. In addition, major waterborne tonnages of grain mill products, processed feeds, tallow, flour, seminola, vegetable oils, sugar, and molasses enhance farm income. Altogether, in 1983, 29.7 million tons of miscellaneous commodities not directly affecting the six industries discussed were carried on the Ohio and its tributaries.

In the evaluation in earlier times of navigation projects now completed and in service, movements then of lesser volume were overlooked, but, with the passage of time, evolved into major tonnages. In the long view into the Twenty-First Century, similar growth of unexpected commodity composition will almost certainly develop.

III. THE OHIO VALLEY PROGRAM AS A FEATURE OF REDUCED FEDERAL EXPENDITURES FOR IMPROVEMENT OF THE U.S. INLAND WATERWAYS

We are keenly aware of the urgency of budgetary restraint in Fiscal 1987 as well as the objective of balancing the Federal budget by Fiscal 1991. Our recommendations are thoroughly in harmony with this objective. Indeed, we present them as a component of a substantial reduction in general fund expenditures.

Decline Under Way in Federal Inland Waterway Expenditures

In real terms, the total programmed expenditures for inland waterway modernization throughout the United States are already in a long-term process of reduction. Stated in dollars of 1985 purchasing power, the Federal Government expended from general revenue funds for new work on the U.S. inland waterways during the five years, 1971-1975, an average of $505 million per year. For the five years, 1981-1985, this was down to $384 million per year.

Prospective Lower Level of New Work Expenditures

With the expeditious progress we recommend in the Ohio Valley, and accompanied by corresponding progress on feasible projects elsewhere in the country, the expenditure from general revenue funds may be expected to decline still more. The highly comprehensive and authoritative National Waterways Study issued by the U.S. Army Engineers Water Resources Support Center names 41 shallow draft waterway projects throughout the country on which work is currently needed or soon will be needed to relieve costly congestion. All the Ohio Valley projects we recommend are included in this category.

The total cost estimate for the 41 projects in 1985 dollars is \$6.7 billion.[10] While the study does not specify a time span for this work, a terminal date of 2015 would appear the earliest practically achievable, that is, 30 years from now. In 1985 dollars, this amounts to \$223 million per year, down from the \$384 million of 1981-985.

The Inland Waterways Trust Fund

But, even more to the point, a substantial portion of this \$223 million average need not come from general revenue funds. Ever since 1980 our industries have been paying a waterways fuel tax, now accumulating in the Inland Waterways Trust Fund and available to the Congress for waterway rehabilitation and new construction. The Department of the Treasury projects a balance in this Fund at the beginning of Fiscal 1987 of \$257.6 million with collections into the Fund thereafter in the range of \$68.0 to \$77.0 million per year.

It becomes obvious that the Inland Waterways Trust Fund can well sustain substantial charges for new work and rehabilitation, reducing the yearly outlays from general revenue funds from the projected \$223 million average to a sum well below \$200 million (in 1985 dollars). For example, if 20 percent of the new work expenditures were to be financed from the Fund, the outlays from general revenue funds would average only \$178 million per year. In comparison with the \$384 million average from 1981 to 1985, this is more than a 50 percent reduction.

There is a real prospect that the Trust Fund's potential contribution may be markedly enlarged. Under the agreement reached in June, 1985, between the Director of the Office of Management and Budget and a number of key Senators, the fuel tax rate would be raised by one cent per gallon annually between 1988 and 1998 to 20 cents per gallon. We do not argue here either for or against this increase. Neither do we hold that our example of a withdrawal of 20 percent of new work expenditures is the right measure. But, whatever resolution may be reached on these questions, it is obvious that our recommendations fall in a context of a very large reduction in expenditures of general revenue funds for modernization of the inland waterways.

Magnitude of the Ohio River System in the National Waterways Program

The Ohio River System is a major sector of this prospect. The system has a navigable length of 2,582 miles. It carries 35 percent of the nation's total inland waterborne tonnage. This tonnage is nearly one-half of the total inland tonnage on the Mississippi River and all its tributaries combined. The waterborne freight on the Ohio and its tributaries is critical to extensive sectors of major American industries: coal mining, electric energy, steel production, petroleum fuels, chemicals, and farming, among others.

Much of the Ohio River's commerce moves also on connecting waterways. Well over one-half of all the tonnage moving on the Mississippi at its confluence with the Ohio originates or terminates on the Ohio and its tributaries. This commerce traverses all reaches of the Upper and Lower Mississippi, the Illinois, the Missouri, the Arkansas, the Gulf Intracoastal, and other waterways connecting with the Mississippi. Ohio River commerce will prove a critical element in the success of the Tennessee-Tombigbee connection with the Gulf Coast. The high costs of congestion and obsolescence on the Ohio thus communicate into impaired traffic on these connecting streams and deprive the public of the full benefits of past Federal investment in their improvement.

We must emphasize, therefore, that the Ohio River program is a central and comprehensive sector of any undertaking towards modernization of the inland waterways system of the United States.

The Waterways Fuel Tax as a Dedication to a Waterways Improvement Program

We trust that your committee will agree that it would be grossly unjust to reduce or defer new work on the inland waterways for budgetary reasons while continuing to collect the existing waterways fuel tax. This tax was imposed explicitly to facilitate financing of such new work. Since the beginning of the 1980's it has been the policy of the Federal government with respect to taxation in general, earlier to reduce tax rates, and now to refrain from increasing them. Yet, on the inland waterways from 1980 to 1985 the fuel tax was increased on the schedule specified in the 1978 statute from zero to 10 cents a gallon. This conspicuous and burdensome exception to general tax policy can be justified only on the assumption that, on economically feasible waterway projects, work proceed expeditiously without deferral for budgetary reasons. Otherwise, the objective of the fuel tax would be defeated. The affected industries would be subjected to the double burden of the waterways fuel tax, on the one hand, and, on the other, to the high cost of waterways neglect consequent on reduced Federal expenditure.

Initial Low Level of Expenditures in the Ohio Valley

For the near term between now and 1991, the outlays in the Ohio Valley will be at the low levels of planning, engineering, and initial construction. For Fiscal 1987, it will be noted that, apart from continued rehabilitation of the Dashields structure, those projects for which feasibility has been established will be only in the Planning and Engineering stages or in the process of land acquisition.

After 1987, even after construction will probably have been initiated on the Monongahela and at Gallipolis on the Ohio, the expenditures will remain relatively small. The Army Corps of Engineers estimates that, during the first four years of construction, the outlays at Gallipolis will have accumulated to only some 20 to 25 percent of the total construction cost. Construction of most of the other recommended

Ohio Valley projects cannot begin until the early 1990's, and, even with respect to those which will be under construction by 1991, the work will still be in the less costly early stages.

Thus, in both the long-term and short-term views, our recommendations contemplate reduced expenditure of general revenue funds on the inland waterways and are thus entirely harmonious with the objective of budgetary restraint and a balanced Federal budget by 1991 and thereafter into the Twenty-First Century.

IV. INLAND WATERWAY EXPENDITURES AS AN INVESTMENT

It is critically important that Congress recognize that, in their budgetary impact, expenditures on modernization of the inland waterways are not an expense but an investment. If such expenditures were merely for current services or benefits to be realized only within the year, however meritorious these benefits might be, such expenditures would constitute a draw-down on the national estate. But, this is not the case. Federal expenditures for long-lived capital improvements in the productive infrastructure of the national economy represent, not a draw-down on the national estate, but an enhancement. Waterway projects are emphatically among these.

Congress authorizes and funds waterway projects only on the basis of advance professional in-depth studies of economic feasibility. With the completion of a waterway project so justified, the nation is thus richer, not poorer, by virtue of the expenditure. The economic feasibility studies of some of the Ohio Valley projects have not yet been completed, but I shall refer to two to illustrate the opportunity for immense enlargement of the nation's wealth and future prosperity they represent.

Gallipolis

In 1987, the existing locks and dam structure at Gallipolis, Ohio, on the Ohio River will be fifty years old. This structure is badly deteriorated, dangerous to navigation, and of inadequate capacity. Based on comprehensive study supplemented by contracted analyses by consulting agencies, the Army Corps of Engineers recommends rehabilitation and supplementary construction at the site, providing a modernized facility, highly reliable, and of dimensions adequate to the projected rising volumes of traffic. The recommended plan would not only provide the national economy a return on the investment of 7 5/8 percent annually over the project's 50-year life. In addition, over and above the 7 5/8 percent return, it would yield annual economic benefits of $12.40 for each $1.00 of Federal costs. The costs, so identified, are comprehensive, including both capital charges and operation of the facility.

Olmsted

Again, near the mouth of the Ohio River, downstream from its confluence with the Tennessee, are two lock and dam structures identified as #52 and #53. They were completed in 1928 and 1929 and later supplemented by temporary locks, one of which has already outlived its design life. Both structures are obsolete, badly deteriorated, and congested. On the basis of a thorough feasibility study, the Army Corps of Engineers tentatively recommends their replacement with a single new structure at Olmsted, Illinois, of modern design and capacity adequate for projected traffic demand. In its study, the Corps set a target return of 8 3/8 percent on the Federal investment, to be realized yearly over a projected 50-year service life.

Not only does the Olmsted project meet the 8 3/8 percent target, but, in addition, it offers massive national economic benefits. Because the existing dams are of wicket design, permitting open river operation during much of the year, the Corps evaluated the alternative of allowing the present works to deteriorate to the point of complete retirement and non-replacement. In comparison with this alternative, the Olmsted project promises, over and above the 8 3/8 percent return, annual benefits exceeding $25.00 for each $1.00 of costs.

On the other hand, as against the alternative of rehabilitation and continued operation of the existing works, the Olmsted project promises, in addition to the 8 3/8 percent return, annual benefits of $3.00 for each $1.00 of incremental cost - cost in both instances comprising both capital charges and operations and maintenance. Future inflation, of course, would greatly increase these ratios of benefits to costs in dollar terms.

Forms of Income Enhancement

Thus, the waterway projects we recommend are a capital investment in the infrastructure of the national economy and a foundation on which private venture will prosper and grow. The benefits we have cited will take various forms, including rising investment opportunity in basic industries, more jobs, enhanced farm income, reduced fuel prices for homes, factories, and motor vehicles, and lower electric bills. Through the process of respending, sustained and rising personal incomes in the Ohio River Basin exert a multiplier effect throughout the national economy. For each project, these enhancements of the national income will persist, year after year, over a projected service life of 50 years.

Enhancement of Government Revenues

Rising government revenues should be counted among the benefits. For state and local governments, higher incomes and employment, with their associated strengthening of property values, enlarge the tax base. For the Federal Government, there would appear little doubt that the national income enhancement attributable to a soundly-conceived waterway project will generate an increase in Federal tax revenues over 50 years of service life much in excess of the one-time investment in the project's construction.

For example, according to the 1982 feasibility study by the Corps of Engineers, the recommended plan of improvement at Gallipolis will constitute a Federal investment (including interest during construction) estimated at $313.0 million. The net benefits of the project will consist mainly of an increase in taxable incomes. Because these benefits are to be realized over 50 future years, they have been discounted in the feasibility study at 7 5/8 percent per year. After this discounting, the residual net benefit at Gallipolis has a present value of $127.3 million per year, or about $6.3 billion over the 50-year service life.

While the resulting increment to Federal revenues cannot be precisely measured, some indication of its magnitude may be found in the fact that Federal revenues from taxes on individual incomes average about 15 percent of the incomes so taxed. Fifteen percent of the projected $6.3 billion income increment attributable to the Gallipolis project is $945 million, about three-fold the investment.

Some may protest that this is not persuasive because the investment has to be made in the early future, whereas the increment to revenue will be realized only in a future much more distant (that is, over the 50-year service life). Such protest would be invalid. The $6.3 billion income increment of the project is the residue of a much larger sum, fully discounted for its futurity at the rate of 7 5/8 percent for each of the 50 years. The associated revenue enhancement, estimated roughly at $945 million, is thus a present value, directly comparable with the $313 million investment.

In short, we are recommending with respect to Gallipolis that the Federal Government make an investment of $313 million in a property which, upon completion, will have a revenue-enhancing value to the Government in the general neighborhood of $945 million. The other projects we recommend are of the same character. It is hard to imagine a proposal more harmonious with a Federal policy of budgetary thrift.

Our recommendations for Federal expenditure, therefore, do not contemplate any drain upon the Government's or the nation's resources, but rather for their enhancement and for a long-term strengthening of the national economy and an investment in a future increase in Federal revenues.

Recent Neglect and Obsolescence of the U.S. Inland Waterways

On the inland waterways, the Federal Government has been letting this kind of investment opportunity pass it by. During the five years, 1966-1970, the Corps of Engineers expended in current dollars an average of $249.8 million per year on new work. During the five years, 1981-1985, the corresponding yearly expenditure was $358.4 million, an increase of 43.5 percent. But, meanwhile, inflation had boosted construction costs more than four-fold, so that actual new work performed had diminished drastically. Stated in dollars of constant purchasing power, outlays for new work during the 1981-1985 period were only 42.3 percent of what they had been from 1966 through 1970. In other words, the program had been cut by more than half. Chart I, herewith, presents the overall picture of this deterioration from 1962 through 1985.

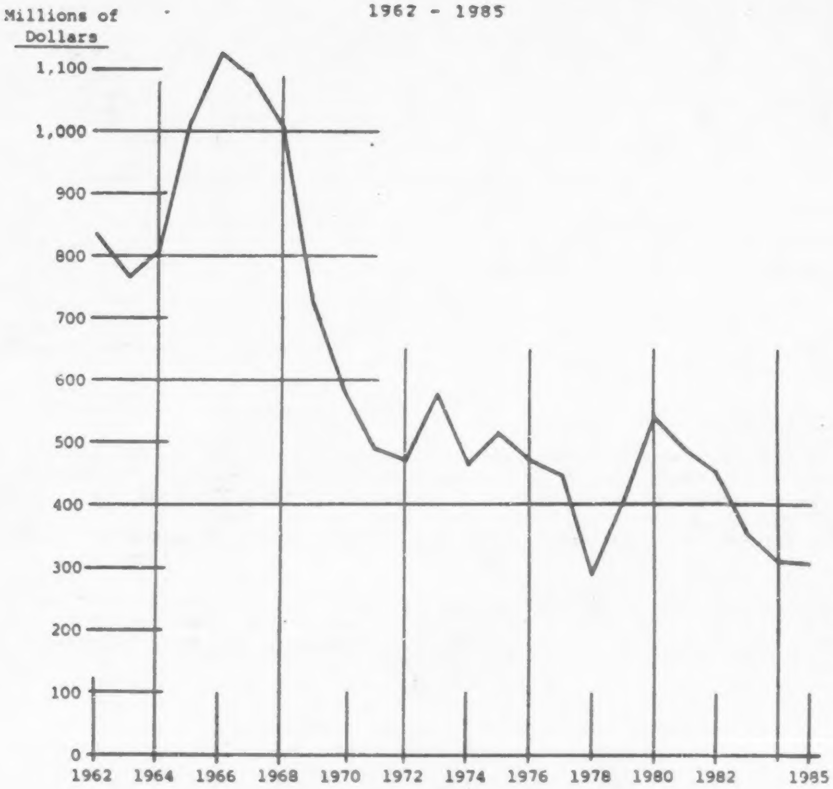
The pressures of economic growth upon the choke points requiring relief cannot be sustained indefinitely. Between the 1969-1974 period and that of 1979-1983, the ton-miles of freight carried on the U.S. shallow-draft inland waterways increased by 38.0 percent. But, Federal expenditures on new work, stated in dollars of constant

(17)

CHART I.

U. S. SHALLOW-DRAFT INLAND AND INTRACOASTAL WATERWAYS FEDERAL EXPENDITURES FOR REHABILITATION AND NEW CONSTRUCTION IN DOLLARS OF 1985 PURCHASING POWER

1962 - 1985



SOURCES: U. S. Dept. of the Army, Corps of Engineers
Engineering News-Record, General Construction Cost Index

purchasing power, went down 21.4 percent. If these opposing trends continue, mounting congestion at the aging works will continue to raise costs, retard growth, and withhold from American industry much of the efficiencies of a balanced, modernized transportation system.

On the Ohio River System, seven of the existing works on which we recommend action towards improvement were completed in the 1920's. Three were completed in the mid-1930's, and one in 1944. Two temporary installations, with a 15-year design life, were completed in 1969 and 1980, respectively. On the nation's highways we do not expect modern traffic to move via the mud and gravel surface of the old Lincoln Highway. On the railroads, the steam locomotive has been retired. Likewise, on the inland waterways, the pressures of modern industrial practice and magnitude call with rising insistence for release from the constraints of the bygone technology of the Coolidge and New Deal eras.

Building for the Nation's Future

Our recommendations with regard to navigation improvements on the Ohio River System, as an essential feature of the nationwide program for waterways modernization, are entirely harmonious with progress towards a balanced Federal budget between now and the early 1990's - emphatically so with the possibility of supplementary appropriations from the Inland Waterways Trust Fund. Expenditures for a modernization of the Ohio Valley navigation system will constitute a revenue-producing investment in renewed strength of our major industries and agriculture in international competition and in enhanced Federal revenues over the long term.

In his farewell address, President Eisenhower spoke as follows:

> "As we peer into society's future, we - you and I, and our government - must avoid the impulse to live only for today, plundering for our own ease and convenience, the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage."

Those who improved the nation's inland waterways during the first half of the Twentieth Century anticipated these words for our benefit, and, having heard them, we of the present generation can do no less for the generations for the Twenty-First Century.

FOOTNOTES
to
Testimony Presented by:
Kenneth R. Faerber
Commissioner, West Virginia Department of Energy
and
Director, DINAMO/OVIA

[1] The nine navigable waterway states of the Ohio Valley are Alabama, Illinois, Indiana, Kentucky, Mississippi, Ohio, Pennsylvania, Tennessee and West Virginia.

[2] The NCA projections were for total U.S. production, taken here for the Ohio River System at the same percentage to the national total as that in 1983. (see Journal of Commerce, New York, February 27, 1986, page 9A)

[3] The mine value is the weighted average of the total cost production of Pennsylvania, West Virginia, and eastern Kentucky in 1983 of $33.08 per ton. The output per miner-year is likewise the weighted average of these three state areas at 3,023 tons per miner-year. (See U.S. Department of Energy, Coal Production, 1983, pages 30 and 58.)

[4] American Electric Power Company, Inc., 1983 Report to Shareholders, Columbus Ohio, 1984, page 5.

[5] Steel industry expenditures are at average rates per ton of steel nationwide as reported by the American Iron and Steel Institute, Annual Statistical Report, 1983. Prices are as quoted by individual steel companies on private industry.

[6] Wall Street Journal, March 4, 1986, page 25.

[7] These figures are at U.S. averages per ton shipped as reported by the U.S. Department of Commerce, Census of Manufacturers.

[8] The four states are Illinois, Indiana, Kentucky, and Ohio.

[9] Quantity moved as reported by the U.S. Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, 1983, Part 5, Section 2. Values as reported by the U.S. Department of Agriculture, Agricultural Statistics 1984.

[10] U.S. Army Engineer Water Resources Support Center, Institute for Water Resources, National Waterways Study - Evaluation of Alternative Future Strategies for Action, Ft. Belvoir, VA, May, 1982, pages 100 and 129.

Mr. **Bevill**. Thank you for a very fine statement. Anything else?

Mr. **Palmer**. No, sir, we appreciate the support from this committee and look forward to our continued working relationship.

Mr. **Bevill**. We will continue to work with you in doing what we can to accommodate you.

Mr. **Myers**. The committee is well aware of the decrease in the demand for coal, especially in the export market. How much of the coal produced in West Virginia is exported outside the state?

Mr. **Reishman**. West Virginia is the largest coal exporting state. We export approximately 35 to 40 million tons per year out of a total tonnage production of roughly 130. So we are on the magnitude of 25 percent of our coal being exported.

Really as far as the demand question, our tonnage and our production can continue to grow domestically within the state as well as within the nation. It is the employment aspect which is the dwindling figure.

Mr. **Myers**. Of the 35 to 40 million tons, how much leaves the state by barge, by water?

Mr. **Reishman**. I would say only 10 percent of that goes basically through New Orleans. We see a lot of companies in our state that would like to have other options to the all-rail movements to the eastern ports. As we see railroads becoming increasingly strong, less competitive, less willing to compete with one another, the river option certainly is a viable option.

Mr. **Myers**. Ten percent today, how does that compare to ten years ago?

Mr. **Reishman**. It was zero at that time.

Mr. **Myers**. None by barge?

Mr. **Reishman**. Right, none.

Mr. **Palmer**. The way to get that out is by Gallipolis, Winfield lock and dam, and the Monongahela River. The lock and dam infrastructure problem surrounds us. It surrounds West Virginia either from northern West Virginia in the Monongahela or its Gallipolis and the Winfield.

Mr. **Bevill**. You know this subcommittee has been there and seen those three projects and we appreciate the need there. I am curious to know what is the comparison on traffic with the Mississippi River that the Ohio River has.

I know the Ohio is a very busy river obviously.

Mr. **Reishman**. Fifty percent of the Mississippi River traffic comes out of the Ohio River Valley.

Mr. **Bevill**. I believe you said—I had never heard those statistics before—that you have 10 percent of the inland waterway system, 10 percent of the 25,000 miles, and the Mississippi would be a little longer, but those two together is a pretty big percentage of the inland waterway system.

Mr. **Myers**. But 30 percent of the tonnage.

Mr. **Reishman**. Thirty-five percent of the tonnage is on the Ohio Valley system. Though it is only 10 percent of the miles, it represents 35 percent of the water-borne traffic.

Mr. **Bevill**. How does that compare with the Mississippi River?

Mr. **Reishman**. Roughly half the Mississippi as well.

Mr. **Palmer**. The Ohio navigation system represents half and the Mississippi River and Upper Mississippi and Illinois and Arkansas roughly split. We are talking about larger figures than the Columbia and other systems, too.

Mr. MYERS. Some of that 35 percent is on the Mississippi. What you are saying is half the Mississippi business comes out of the Ohio River, is that what you are saying?

Mr. PALMER. No, sir.

Mr. MYERS. The way I interpreted your statement was that half of the Mississippi came out of the Ohio.

Mr. PALMER. I'll put it this way. In 1980 there were 180 million tons of commerce that moved on the Ohio River navigation system and about 40 percent of that either originated outside and came into the Ohio Valley or it originated in the Ohio Valley and went to the Mississippi River, and its other tributaries other than the Ohio.

Mr. BEVILL. Well, thank you very much.

Mr. PALMER. Thank you.

MONDAY, APRIL 14, 1986.

NEW YORK AND NEW JERSEY PORTS

WITNESSES

JAMES J. KIRK, DIRECTOR, PORT DEPARTMENT, THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

KENNETH C. LeFEVRE, DEPUTY COMMISSIONER, NEW JERSEY DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

MICHAEL P. HUERTA, COMMISSIONER OF PORTS AND TERMINALS, CITY OF NEW YORK

ALFRED HAMMON, SUPERVISOR, HARBOR PLANNING, PORT AUTHORITY OF NEW YORK AND NEW JERSEY

Mr. BEVILL. Next, Mr. Jim Kirk, and Kenneth LeFevre. I believe you are all together.

Mr. KIRK. Mr. Chairman, subcommittee members, I would like to introduce Mr. Kenneth LeFevre on my far left, the Deputy Commissioner of the New Jersey Department of Commerce and Economic Development; on my immediate left, Mr. Michael Huerta of the New York City Department of Ports, International Trade and Commerce; and on my right, Mr. Alfred Hammond, the Supervisor of Harbor and Navigation Projects for the Port Authority of New York and New Jersey.

I am James J. Kirk, Director of the Port Department of the Port Authority of New York and New Jersey. Each of the commissioners, and myself, will offer fiscal year 1987 recommendations for specific projects in the Port of New York and New Jersey. Keeping with your request for brevity, we will summarize our remarks but ask that our full joint statement with its witness list on the cover and funding summary be accepted for the record.

We of course will be glad to answer any questions that the committee may have.

I will confine my remarks to two projects. The first is the Kill Van Kull and Newark Bay Channels project, which was authorized in the fiscal year 1985 Supplemental Appropriations Act, for deepening from 35 to 45 feet at an estimated cost of $291 million.

The Port Authority is urging an additional depth of only 40 feet at an estimated cost of $145.4 million. We further ask that the $12 million proposed for this project in fiscal year 1987 be increased to $50 million and respectfully suggest that funding this critical project at the $12 million rate could result in a nine-year completion of the $145.4 million project.

The time from authorization of the study of this improvement in 1972 to its authorization for construction in 1985 has already taken about fourteen years.

The needs of deep draft container and other shipping to Port Newark and Elizabeth Port Terminal already constrained by a 35 foot deep channel simply cannot wait any longer. We are therefore urging that this long delayed project be finished in two years, and for this purpose request an appropriation of $50 million which will be matched by a Port Authority share of about $17 million.

We believe the Corps has the capability to do this much work in fiscal year 1987, and we are currently negotiating with the Corps of Engineers to conclude the necessary agreement of local cooperation by June 30 for a work start in the fall.

I would also like to note that we greatly appreciate the inclusion of the Kill Van Kull project in the fiscal year 1985 Supplemental Appropriation Bill last year. If the amount we are requesting for the project is provided by Congress, the Corps of Engineers will be able to take maximum advantage of the head start they have and complete the work in two years.

The second project that I will address is the New York Harbor collection and removal of drift project. Under construction since 1976, this project is transforming large stretches of the waters and shoreline of the Port from a graveyard of sunken hulks and deteriorating areas into opportunities for productive reuse and more pleasing aesthetics.

We would ask the budget recommendation of $4,600,000 be increased to $5 million to meet expanding state and city cleanup targets, and fulfill the matching funds they have available for this work.

This is an immensely worthwhile and popular undertaking and I want to thank this subcommittee for giving it its continuing support over the last decade.

In closing, Mr. Chairman, I would thank you for the opportunity to appear and say that I hope you can visit the Port this July when the nation celebrates the Centennial of the Statue of Liberty.

I will now ask Deputy Commissioner LeFevre to speak to the special project interests of the State of New Jersey, which I might add the Port Authority is also in full support of.

[The joint statement follows:]

JOINT STATEMENT
JAMES J. KIRK, DIRECTOR, PORT DEPARTMENT
THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
THE HONORABLE BORDEN R. PUTNAM, COMMISSIONER OF COMMERCE AND ECONOMIC DEVELOPMENT
STATE OF NEW JERSEY
AND
THE HONORABLE MICHAEL P. HUERTA, COMMISSIONER OF PORTS AND TERMINALS
CITY OF NEW YORK
ON BEHALF OF APPROPRIATIONS IN FISCAL YEAR 1987
FOR FEDERAL CHANNEL AND RELATED DEVELOPMENT IN THE PORT OF NEW YORK AND NEW JERSEY
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS
CONGRESS OF THE UNITED STATES
WASHINGTON, D.C.

APRIL 14, 1986

Representing Also:

Bayonne Chamber of Commerce (NJ)
Board of Pilots Commission, State of New Jersey
Brooklyn Chamber of Commerce (NY)
Chamber of Commerce of the Borough of Queens (NY)
City of Newark, Department of Engineering
City of New York Port Council
Commerce and Industry Association of New Jersey
Downtown Brooklyn Development Association (NY)
Greater Newark Chamber of Commerce (NJ)
Hudson County Chamber of Commerce and Industry (NJ)
International Longshoremen's Association
Local 333-United Marine Division
Maritime Advisory Council of New Jersey
Maritime Association of the Port of New York and New Jersey
Maritime Port Council of Greater New York and Vicinity
New Jersey Alliance for Action
New Jersey State Chamber of Commerce
New York Board of Trade
New York Chamber of Commerce and Industry
New York-New Jersey Port Promotion Association
New York Shipping Association, Inc.
New York State Department of Environmental Conservation-Region II
Save Our Port
Staten Island Chamber of Commerce (NY)
Towboat and Harbor Carriers Association of New York and New Jersey
Union County Chamber of Commerce (NJ)
United New Jersey Sandy Hook Pilots Benevolent Association
United New York Sandy Hook Pilots Benevolent Association
West Side Association of Commerce in the City of New York, Inc.

I am James J. Kirk, Director, Port Department of The Port Authority of New York and New Jersey. Joining me are The Honorable Borden R. Putnam, New Jersey State Commissioner of Commerce and Economic Development, and The Honorable Michael P. Huerta, New York City Commissioner of Ports and Terminals. Each of us will address specific projects commensurate with our roles as the agency of local cooperation or according to our special interests. We have also been authorized to speak on behalf of the 29 civic, trade, labor and governmental organizations listed on the cover sheet of this statement. We thank you, Mr. Chairman, and the members of your Subcommittee for affording us this time to make our project funding needs known to you.

In keeping with the request of the Subcommittee, I will summarize our recommendations for Federal Fiscal Year 1987 appropriations for deepwater port navigation projects in the Port of New York and New Jersey under the jurisdiction of the U.S. Army Corps of Engineers' Civil Works Program.

They are as follows in the order of our presentation:

PROJECT	TYPE	RECOMMENDATIONS	
		BUDGET	PORT
Kill Van Kull and Newark Bay Channels	Construction	$12,000,000	$50,000,000
New York Harbor Collection & Removal of Drift	Construction	4,600,000	5,000,000
New York Harbor and Adjacent Channels	Study	200,000	600,000
Arthur Kill South to Fresh Kills	Study	None	250,000
Arthur Kill Channel	Study	500,000	700,000
TOTAL		$17,300,000	$56,550,000

KILL VAN KULL AND NEWARK BAY CHANNELS PROJECT (CONSTRUCTION)

A project of paramount importance to The Port Authority of New York and New Jersey at this time is the Kill Van Kull and Newark Bay Channels Project. After more than 13 years of Corps study intermingled with various delays, this project is at last authorized for construction in the Fiscal Year 1985 Supplemental Appropriations Act (Public Law 99-88) and is further recommended for authorization in currently pending Federal port legislation, namely, H.R.6 and S.1567. The Port Authority, on October 25, 1985 reconfirmed its 1978 intent to provide local cooperation for this project and therein also notified the Assistant Secretary of the Army for Civil Works of its willingness to participate in the required non-Federal cost-sharing for this project. We are currently working with the Corps of Engineers to conclude by the June 30, 1986 deadline execution of the Agreement of Local Cooperation with such cost-sharing as is required therein.

The proposed Federal Budget recommends $12 million in Fiscal Year 1987 as a start to a $291 million deepening of this project to a depth of 44 feet from its present depth of 35 feet. Given the long delay that has already occurred in realizing this improvement, we have requested the Corps to provide the urgently needed initial depth of 40 feet in two years. The latest estimated total cost of this depth is $145.4 million. Under cost-sharing, for the first time in a Federal channel deepening project, the Port Authority of New York and New Jersey will provide 25 percent or $36.3 million during construction. The Federal Government's contribution is thereby reduced to $109.1 million or 75 percent.

The $12 million Budget recommendation appears to be seriously inadequate for completing a $109 million construction program in a reasonable period of time. The deep draft shipping that is now constrained by the 35-foot depth of this waterway cannot afford the risk of further delays. The urgency of this work is dramatized by the grounding of a large United States Lines containership on the rocks off Bergen Point at the junction of Newark Bay and the Kill Van Kull on March 24, sending the vessel to the shipyard for repairs. The project calls for a widening of this junction, which is also used as a turning basin. It is essential, therefore, that this improvement be completed in two years.

This is a matter of highest priority for the Port of New York and New Jersey. Thus, we urge a Federal appropriation of $50 million for Fiscal Year 1987 to be matched by a Port Authority share of $16.7 million to achieve this two-year schedule.

NEW YORK HARBOR COLLECTION AND REMOVAL OF DRIFT PROJECT (CONSTRUCTION)

With construction underway since 1976, the New York Harbor Collection and Removal of Drift Project (Waterfront Cleanup) is aimed at the removal of 2,230 sunken hulks and 149 decaying shore structures that are the sources of dangerous, unsightly and costly harbor drift.

Major progress in waterfront clearance has been made to date under this project, one which enjoys widespread bi-State community participation and is continuously gaining momentun as its benefits become increasingly known and visible. It is a project that has long involved non-Federal cost-sharing in the form of a one-third local contribution for removal work and 100 percent local financial responsibility for required repairs to those estimated 182 shore structures considered repairable and usable.

The recommended appropriation of $4,600,000 is a welcome improvement to prior fiscal year appropriations for the project. However, in order to keep pace with local targets and the availability of local financial resources, we request that a modest $400,000 be added to allow for the completion of design work and the initiation of construction in additional areas in Jersey City, New Jersey and in Brooklyn, New York, for a total of $5,000,000.

Let me take note for a moment of the fact that Project expenditures are rapidly nearing the current Federally-authorized ceiling of $28,725,000. With more than $17,000,000 in Federal funds already expended, the Project could grind to a halt in less than two years unless the spending ceiling is appreciably raised to complete this project as authorized. Legislative measures will, therefore, be required to achieve a realistic expenditure authorization of $55 million to permit completion of the Project by its present target date of February 1993.

I will now turn over the remainder of our presentation to Commissioners Putnam and Huerta.

Mr. Chairman and distinguished members of the Subcommittee, I am Borden R. Putnam, Commissioner of New Jersey's Department of Commerce and Economic Development. In that capacity I also serve as Honorary Chairman of the New Jersey Maritime

Advisory Council. The Council was established within our Office of Business Advocacy to emphasize New Jersey's position as a maritime state and that industry's impact on our State economy. The creation of the Maritime Advisory Council marked a commitment by New Jersey to provide the private sector with an ombudsman to assist in coordinating statewide waterfront development and to promote Federal river and harbor projects of benefit to New Jersey and the region.

NEW YORK HARBOR AND ADJACENT CHANNELS (STUDY)

This Department was pleased to see $200,000 included in the proposed Budget for the New York Harbor and Adjacent Channels Project in Fiscal Year 1987 to complete the final survey report for the Claremont Terminal and Port Jersey Channels. These studies, authorized by Congress in 1968 and 1980, respectively, were consolidated and initiated within this project to determine the feasibility of deepening the privately-maintained 24-foot deep Claremont Terminal and 35-foot deep Port Jersey Channels for commercial deep-draft navigation. The users of these channels urgently require deeper water to reduce shipping costs, increase their ability to continue to participate in the import/export market, service growing fleets of larger vessels and provide safer access to their facilities.

Although the proposed Fiscal Year 1987 funding will be sufficient to complete the final study report by the Corps of Engineers by June 1987, New Jersey requests the addition of $100,000 for Continued Planning and Engineering (CP&E) for the Port Jersey Channel, as well as $200,000 for Continued Planning and Engineering (CP&E) for the Claremont Terminal Channel. This added funding will allow these vitally important projects to continue without delay beyond the final survey report and into the next phase in an uninterrupted manner.

We are anxious for these projects to progress because of their significant impact on our region's economy. The Port Jersey Channel serves 13 container lines at a privately-financed, 100-acre facility built at a cost of $50 million and having on-site employment in excess of 600 people. During 1985, this terminal handled 364 vessel calls and more than 15% of the total container traffic in the New York and New Jersey Port District.

The 24-foot deep Claremont Terminal Channel presently accommodates 35 vessels and 750,000 tons of cargo annually while directly employing 200 people from the region. This waterway handles in excess of 40% of the scrap metal shipped from the Port District annually, and with deeper water could significantly improve its ability to serve the region.

As part of the New York Harbor and Adjacent Channels Project we also request an appropriation of $100,000 to revisit and study the feasibility of modifying the Ambrose and Anchorage Channels, which are also part of this project. The larger petroleum and petro-chemical deep-draft tanker vessels now in the world market are able to realize immediate savings by utilizing the naturally deep water of the Upper New York Bay Anchorage off Staten Island. A deepening of this 45-foot deep Federal waterway to serve this anchorage would be considerably reduced in cost, since the Corps of Engineers has authorized private interests to mine sand from its lower reaches to a depth down to 53 feet, an authority which could be extended upstream in the future.

In summary, we ask that the Budget recommendation of $200,000 for this project be increased to $600,000.

ARTHUR KILL SOUTH TO FRESH KILLS (STUDY)

The 35-foot deep existing Federal project in the Arthur Kill South to Fresh Kills precludes the full loading of liquid and dry bulk cargo ships destined for shoreside facilities. This situation requires that large oceangoing vessels either light load at substantial loss of economy, or perform expensive lightering operations. Local interests in both New York and New Jersey desire deeper channels to streamline operations, realize considerable transportation savings and enhance adjacent underutilized properties to accommodate additional facilities.

Six deep-draft bulk facilities along the Arthur Kill extension handle annual cargo in excess of 10 million tons. Petroleum, petrochemicals, specialty chemicals, sulphur and cement are carried in large modern vessels which could immediately benefit from substantial savings if the existing channels were deepened. The area is highly industrialized and this channel improvement is consistent with adjacent land uses.

For these reasons it is requested that $250,000 be appropriated in Fiscal Year 1987 so a general investigation by the Corps of Engineers can start to address the navigation problems of the Arthur Kill South to Fresh Kills in anticipation of project authorization in pending water resources legislation.

We have designed this additional appropriation request of $650,000 for these four projects to be consistent with Congressional efforts to reduce unemployment and promote economic growth. The area in which the above study projects are located is urgently in need of economic stimulation. Delays in these waterway projects will result in higher port costs, loss of employment and terminal expansion and a slower regional economic recovery. Before I defer to Commissioner Huerta, let me state for the record that the State of New Jersey endorses the project funding requests made by my colleagues.

Thank you for your consideration of our recommendations and the opportunity to present these projects to this committee.

Thank you Commissioner Putnam. I am Michael P. Huerta, Commissioner of the Department of Ports and Terminals, City of New York. I assumed this position on March 3rd, and I am pleased to have this opportunity to meet with the members of the Subcommittee. I look forward to working with you on this and other important issues. The City of New York, together with the Port Authority of New York and New Jersey, the State of New Jersey, and numerous maritime, union, and civic organizations, have once again approached this request with a view towards the region's need for channel improvements and other navigation projects. We join with Mr. Kirk and Commissioner Putnam in endorsing the funding requests for all the projects that are the subjects of our joint statement.

The three major marine terminals located in New York City, the Red Hook and the South Brooklyn Marine Terminals in Brooklyn, and the Howland Hook Marine Terminal on Staten Island, are all undergoing substantial rehabilitation, expansion, and improvements. The purchase of new container cranes, improved storage and berthing capabilities, and the rehabilitation of infrastructure, are publicly financed capital improvements that will total in excess of $165 million. The appropriation of Federal funds for the planning and construction of deeper channels in the Port is necessary if we are going to fully utilize these landside improvements. I would like to focus my remarks today on the deepening of the Arthur Kill Channel, located between Staten Island and New Jersey.

ARTHUR KILL CHANNEL PROJECT (STUDY)

On March 7th, the Corps of Engineers' Board of Engineers For Rivers and Harbors, approved a feasibility study which was authorized by the Congress on May 9, 1979, for improving the Federal channel from the confluence of the Kill Van Kull and Newark Bay Channels to the Exxon and Gulfport petroleum terminals. The Arthur Kill Channel Project is the City's number one priority. This critical channel improvement project will deepen the existing 35-foot deep channel to 41 feet to the Howland Hook Marine Terminal, and to 40 feet from the Howland Hook Marine Terminal to the major private users, the Exxon refinery in Bayway and the Gulfport Terminal on the Staten Island shoreline. The cost for these improvements has been estimated at $51 million in January 1985 dollars.

United States Lines, a tenant at the Howland Hook Marine Terminal, has a fleet of 12 "super-containerships" which are more than 950 feet long, have a design draft of 39 feet and are capable of carrying 2,000 containers. These vessels are engaged in a world-wide service which originates in the Far East. The Howland Hook Marine Terminal is only one of two ports on the East Coast to be involved with this service. Under the present situation, these vessels must either arrive loaded at less than full capacity or wait for the high tide, both inefficient and costly options. Nearly $100 million in terminal improvements will be made at Howland Hook in the next few years in order to provide the berths, storage capability, warehousing, and safety needs of the facility. Deepening and widening of this channel is vital to improving ship handling capabilities at Howland Hook and for the shipment of bulk products to terminals further south on the Arthur Kill. The improvements will also eliminate potentially dangerous navigational hazards to vessels by the widening of sections of the channel.

This channel improvement project is tied in with the improvements to the Kill Van Kull and Newark Bay Channels Project. Since the Kill Van Kull is located between the Arthur Kill and the main shipping channel to sea, it must be dredged first. Construction on the Kill Van Kull Channel is slated to begin this Fall and it is anticipated that work could reach the junction of the Newark Bay Channel by the end of Fiscal Year 1987. Construction work on the Newark Bay and Arthur Kill Channels could thereafter proceed at the same time. However, in order for construction to start on this project in FY 1988, all of its design and engineering work must be completed in FY 1987. The Corps of Engineers has indicated that $900,000 is required to complete all of such necessary work. The Fiscal Year 1986 appropriation included $200,000 for Continued Planning and Engineering (CP&E) and the proposed Fiscal Year 1987 Budget includes $500,000, thereby creating a shortfall of $200,000 necessary to complete the work. We therefore request that $700,000 be appropriated in Fiscal Year 1987 for this project so that the Corps can complete its work and be prepared to move forward with construction in Fiscal Year 1988.

This, Mr. Chairman, concludes our statement. We know you face painful fiscal decisions in the resolution of our nation's growing budget deficit and that we are recommending a substantial increase in Federal expenditures. To that I can only take note that ship channels and the marine terminals they support, contrary to some other types of public expenditures, are investments in our nation's prosperity and to that end warrant your most considerate attention. It is also noteworthy that 1986 is the first year in the nation's history that local ports like New Jersey - New York have become joint funding partners in the construction of channels. I can think of no more profound way to signify the critical nature of these navigation improvements.

On behalf of Mr. Kirk, Commissioner Putnam and myself, let me thank you for the courtesy of presenting our recommendations to you. We will be pleased to try to answer any questions you may have.

Mr. **LeFevre**. Thank you, Mr. Chairman, and distinguished members of the subcommittee.

I am Kenneth C. LeFevre, Deputy Commissioner of the New Jersey Department of Commerce and Economic Development.

Our Department was pleased to see $200,000 included in the President's budget for the New York Harbor and Adjacent Channels Study Project in fiscal year 1987 to complete the final survey report for the Claremont Terminal and Port Jersey Channels. These studies, authorized by Congress in 1968 and 1980 respectively, were consolidated and initiated to determine the feasibility of deepening the privately-maintained 24-foot deep Claremont Terminal and 35-foot deep Port Jersey Channels for commercial deep-draft navigation.

Although the fiscal year 1987 funding will be sufficient to complete the final study report by the Corps of Engineers by June 1987, New Jersey requests the addition of $100,000 for the continuation of planning and engineering for the Port Jersey Channel, as well as $200,000 for the continuation of planning and engineering for the Claremont Terminal channel.

This added funding will allow these vitally important projects to continue without delay beyond the final survey report and into the next phase in an accelerated manner.

We are anxious for these projects to progress because of their significant impact on our region's economy. The Port Jersey Channel serves 13 container lines and handled more than 15 percent of the total container traffic in the New York/New Jersey port district, while providing on-site employment to 600 people. The 24-foot deep Claremont Terminal channel presently employs 200 people from the region and handles in excess of 40 percent of the scrap metal shipped from the port district annually.

As part of the New York Harbor and Adjacent Channels Project Study, we also request an appropriation of $100,000 to revisit and study the feasibility of modifying the Ambrose and Anchorage channels. The larger petroleum and petrochemical deep-draft tanker vessels now in the world market will be able to realize immediate savings by utilizing the naturally deep water of the upper New York Bay Anchorage off Staten Island.

A deepening of this 45-foot deep Federal waterway would be considerably reduced in cost since the Corps of Engineers has authorized private interests to mine sand from its lower reaches to a depth down to 53 feet, an authority which could be extended upstream in the future.

The final project which I would like to bring to your attention is the Arthur Kill South to Fresh Kills. The 35-foot deep existing Federal project in the Arthur Kill South to Fresh Kills precludes the full loading of liquid and dry bulk cargo ships destined for shoreside facilities. This situation requires that large ocean-going vessels either light load at substantial loss of economy, or perform expensive lightering operations.

Six deep draft bulk facilities along the Arthur Kill extension handle annual cargo in excess of 10 million tons. Petroleum, petrochemicals, specialty chemicals, sulphur and cement are carried in large modern vessels which could immediately benefit from substantial savings if the existing channels were deepened.

For these reasons, it is requested that $250,000 be appropriated in fiscal year 1987 so a general investigation by the Corps of Engineers can start to address the navigation problems of the Arthur Kill South to Fresh Kills in anticipation of project authorization in pending water resources legislation.

We have designed this additional appropriation request of $650,000 for these four projects to be consistent with congressional efforts to reduce unemployment and promote economic growth. Delays in these waterway improvements will result in higher port costs, loss of employment and terminal construction and a slow economic recovery.

Before I defer to Commissioner Huerta, let me state for the record that the State of New Jersey endorses the project funding requests made by my colleagues.

Thank you for your consideration of our recommendations and the opportunity to present these matters to this committee.

Commissioner Huerta.

[The statement of Mr. LeFevre follows:]

Mr. Chairman, and distinguished members of the Subcommittee. I am Kenneth C. LeFevre, Deputy Commissioner of the New Jersey Department of Commerce and Economic Development. Our Department was pleased to see $200,000 included in the President's budget for the *New York Harbor And Adjacent Channels Study Project* in Fiscal Year 1987 to complete the final survey report for the Claremont Terminal and Port Jersey Channels. These studies, authorized by Congress in 1968 and 1980 respectively, were consolidated and initiated to determine the feasibility of deepening the privately-maintained 24-foot deep Claremont Terminal and 35-foot deep Port Jersey Channels for commercial deep-draft navigation.

Although the fiscal year 1987 funding will be sufficient to complete the final study report by the corps of engineers by June 1987, New Jersey requests the addition of $100,000 for the continuation of planning and engineering for the Port Jersey Channel, as well as $200,000 for the continuation of planning and Engineering for the claremont terminal channel. This added funding will allow these vitally important projects to continue without delay beyond the final survey report and into the next phase on an accelerated manner.

We are anxious for these projects to progress because of their significant impact on our region's economy. The Port Jersey Channel serves 13 container lines and handled more than 15% of the total container traffic in the New York/New Jersey Port District, while providing on-site employment to 600 people. The 24-foot deep claremont terminal channel presently employs 200 people from the region and handles in excess of 40% of the scrap metal shipped from the port district annually.

As part of the New York Harbor and Adjacent Channels Project Study, we also request an appropriation of $100,000 to revisit and study the feasibility of modifying the ambrose and anchorage channels. The larger petroleum and petrochemical deep-draft tanker vessels now in the world market will be able to realize immediate savings by utilizing the naturally deep water of the upper New York Bay Anchorage off Staten Island. A deepening of this 45-foot deep Federal waterway would be considerably reduced in cost since the Corps of Engineers has authorized private interests to mine sand from its lower reaches to a depth down to 53 feet, an authority which could be extended upstream in the future.

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Before I defer to Commissioner Huerta. let me state for the record that the State of New Jersey endorses the project funding requests made by my colleagues.

Thank you for your consideration of our recommendations and the opportunity to present these matters to this committee.

Mr. **Huerta**. Thank you.

Mr. Chairman, distinguished members of the subcommittee, I am Michael P. Huerta, Commissioner of the New York City Department of Ports International Trade and Commerce.

The three major marine terminals in New York City are all undergoing massive capital improvements. The purchase of new container cranes, improved storage and berthing capabilities, and the rehabilitation of infrastructure are publicly financed improvements that will total in excess of $165 million. The appropriation of Federal funds for the planning and construction of deeper channels in the port is necessary if we are going to fully utilize these landside improvements.

I would like to focus my remarks today on the deepening of the Arthur Kill Channel. This project is the city's number one priority. It will deepen the existing channel to the Howland Hook Terminal from 35 feet to 41 feet and to 40 feet from the Howland Hook Marine Terminal to the Exxon refinery in New Jersey and the Gulfport Terminal on Staten Island. The cost for these improvements has been estimated at $51 million in 1985 dollars.

United States Lines, a major tenant at the Howland Hook Marine Terminal, has a fleet of 12 "supercontainerships" which are more than 950 feet long, and have a designed draft of 49 feet. These ships are each capable of carrying 2000 containers. Under the present situation, these vessels must either arrive loaded at less than full capacity, or wait for high tide, both inefficient and costly options.

Nearly $100 million in improvements will be made in the next few years to accommodate vessel traffic at the terminal. The deepening and widening of the Arthur Kill is vital to improving ship handling capabilities at Howland Hook, for improving safety in this heavily used channel, and for the shipment of bulk products to terminals further south.

This channel improvement project is tied in with the improvements to the Kill Van Kull and Newark Bay Channels project. Construction on the Kill Van Kull Channel is slated to begin this fall, and it is anticipated that work could reach the junction of the Newark Bay Channel by the end of fiscal year 1987. In order for construction to start on the Arthur Kill Channel in fiscal year 1988 all continued planning and engineering must be completed in fiscal year 1987.

We are therefore requesting that an additional $200,000 over the proposed 1987 appropriation of $500,000, for a total appropriation of $700,000, be included in the fiscal year 1987 budget.

Ship channels and the marine terminals they support, contrary to some other types of public expenditures, are investments in our Nation's prosperity, and to that end warrant your most considerate attention. It is also noteworthy that 1986 is the first year in the Nation's history that local ports like New York-New Jersey have become joint funding partners in the construction of channels, and will be contributing to the economic well being of our country.

The Corps of Engineers has indicated that $900,000 is required to complete all of such necessary work. The fiscal year 1986 appropriation included $200,000 for Continued Planning and Engineering, CP&E, and the proposed fiscal year 1987 budget includes $500,000, thereby creating a shortfall of $200,000 necessary to complete the work. We therefore request that $700,000 be appropriated in fiscal year 1987 for this project so that the Corps can complete its work and be prepared to move forward with construction in fiscal year 1988.

This, Mr. Chairman, concludes our statement. We know you face painful fiscal decisions in the resolution of our nation's growing budget deficit, and that we are recommending a substantial increase in Federal expenditures. To that I can only take note that ship channels and the marine terminals they support, contrary to some other types of public expenditures, are investments in our nation's prosperity, and to that end warrant your most considerate attention.

It is also noteworthy that 1986 is the first year in the nation's history that local ports like New Jersey-New York have become joint funding partners in the construction of channels. I can think of no more profound way to signify the critical nature of these navigation improvements.

[The statement of Mr. Huerta follows:]

Mr. Chairman, I am Michael P. Huerta, commissioner of the New York City Department of Ports International Trade & Commerce.

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I would like to focus my remarks today on the deepening of the Arthur Kill Channel. This project is the city's number one priority. It will deepen the existing channel to the Howland Hook Terminal, from 35 feet to 41 feet and to 40 feet from the Howland Hook Marine Terminal to the Exxon Refinery in New Jersey and the Gulfport Terminal on Staten Island. The cost for these improvements has been estimated at $51 million in 1985 dollars.

United States Lines, a major tenant at the Howland Hook Marine terminal, has a fleet of 12 "supercontainerships" which are more than 950 feet long, and have a designed draft of 39 feet. These ships are each capable of carrying 2,000 containers. Under the present situation, these vessels must either arrive loaded at less than full capacity, or wait for high tide, both inefficient and costly options. Nearly $100 million in improvements will be made in the next few years to accommodate vessel traffic at the terminal. The deepening and widening of the Arthur Kill is vital to improving ship handling capabilities at Howland Hook, for improving safety in this heavily used channel, and for the shipment of bulk products to terminals further south.

Mr. **Bevill**. That was a very fine presentation and certainly we will work with you and your delegation and do the best we can to assist you.

We are very interested in your port and you know this committee has always been very supportive of the New York Port.

You are a very important port to this country, and we appreciate the good work you all do. Thank you very much.

[The statement of Mr. Flippo follows:]

STATEMENT OF THE
HONORABLE RONNIE G. FLIPPO
BEFORE THE ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE
APRIL 14, 1986

The TVA Non-Power Programs

Mr. Chairman, distinguished members of the committee. Once again, the Office of Management and Budget has recommended drastic reductions in the budget for TVA's non-power programs.

This recommendation is particularly distressing to me because of the already severe cuts these programs have sustained during the past years. In 1980, the appropriated budget for TVA was $222 million. The FY87 OMB recommendation is $58 million, or a decrease of 74% since 1980.

The largest share of these funds are dedicated to fertilizer research conducted at the National Fertilizer Development Center. I know that this committee is well aware of the fact that the NFDC is credited with the development of products or processes used to produce 75% of the fertilizers currently in use around the world.

Today, the NFDC continues as the world's leading fertilizer research and development center and as such makes a major contribution to the U.S. position as the most efficient food-producing nation in the world.

In addition to fertilizer research, the NFDC conducts programs in conjunction with the state's land-grant universities, to develop and demonstrate ways of improving agriculture and farm income in the Tennessee Valley. The NFDC is also seeking news ways to convert farm crops and waste materials into usable energy resources.

TVA's role as a national and international demonstration agency, whether in fertilizer research or in their highly recognized program to combat the serious problems of soil erosion, produce benefits which help thousands of farmers and consumers across the nation and world.

TVA has made considerable efforts to enlist the support of private organizations in offsetting the cost of many of the fertilizer programs. However, we should not expect private dollars to fill the gap between OMB's recommendations and what is truly necessary to continue these vitally important programs. There will continue to be a need for a federal commitment if the NFDC is to remain at the forefront of fertilizer and agricultural research.

I would also like to address what may be a misconception on the part of OMB as far as the economic and community development programs of TVA are concerned. Two years ago, when OMB recommended that these programs be eliminated, their stated rationale was that the Tennessee Valley region was now part of the American mainstream and these kind of programs had outlived their usefulness.

I would like to make two points in that regard. The Appalachian region, a large part of which is served by TVA, continues to lag behind the rest of the country in economic development. The income of the region is only two-thirds that of the rest of the nation. Secondly, the TVA economic development programs are not primarily grant programs. They do provide technical assistance and research capability for county and municipal governments and other organizations which might not otherwise be available. In this role, TVA provides a cohesive element in coordinating between these organizations so that common problems can be met with common solutions.

For a half a century, TVA has been a unifying force in the Tennessee Valley. TVA's accomplishments will forever stand out as remarkable testimony to what can be done to overcome tremendous obstacles given the proper resources and commitment. But there is still much to be done, and there is still a need for a TVA as it was envisioned fifty years ago. I want to urge this committee to provide TVA with the necessary resources to continue this valuable work.

Mr. BEVILL. This committee stands adjourned until 2:00 p.m. this afternoon.

AFTERNOON SESSION

MONDAY, APRIL 14, 1986.

ARKANSAS BASIN PROJECTS

WITNESSES

HON. JOHN PAUL HAMMERSCHMIDT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

JAMES O. FOSTER, CHAIRMAN, INTERSTATE COMMISSION; DIRECTOR, ARKANSAS BASIN DEVELOPMENT ASSOCIATION

W. A. GIERINGER, ARKANSAS CHAIRMAN, INTERSTATE COMMITTEE; DIRECTOR, ARKANSAS BASIN DEVELOPMENT ASSOCIATION; EXECUTIVE DIRECTOR, PINE BLUFF-JEFFERSON COUNTY PORT AUTHORITY

CHARLES L. THOMSON, COLORADO CHAIRMAN, INTERSTATE COMMITTEE; DIRECTOR, ARKANSAS BASIN DEVELOPMENT ASSOCIATION; GENERAL MANAGER, SOUTHEAST COLORADO WATER CONSERVANCY DISTRICT

Mr. WATKINS [presiding]. We want to go ahead and get started. We have a colleague from Arkansas with us here this afternoon, John Paul Hammerschmidt. We welcome you here before the subcommittee.

You probably have a formal statement you would like to make for the record. If you would like to summarize, go right ahead.

Mr. HAMMERSCHMIDT. Thank you, Mr. Chairman, and Mr. Myers, and members of the committee.

I really appreciate the opportunity to once again express to this distinguished panel my enthusiastic support for the statement of the Arkansas Basin Association.

As a long-standing member of the Public Works and Transportation Committee's Water Resources Subcommittee, I am more convinced than ever that if we are to meet our national goals of maintaining adequate water supplies, a sound transportation system and flood protection for our citizens, we must rank water resources development as one of the highest national priorities and secure funding for the studies, plans and projects which will work toward these important objectives.

I would like to commend this subcommittee for its willingness in the past to make the proper investments in water resource development and strongly urge you to continue to show the same far-sightedness in ensuring that we invest adequately today for our water supply and transportation needs of tomorrow.

Mr. Chairman, you have a number of very important and distinguished witnesses to hear, so I would ask consent that my full statement appear as part of the record at this point and I also have a statement here from my distinguished colleague, Representative Beryl Anthony, Jr., who was going to introduce Mr. Gieringer.

I think that is going to be done by someone else now. I would ask permission his full statement appear in the record also at this point.

Mr. BEVILL [presiding]. Without objection, so ordered.

[The statements of Mr. Hammerschmidt and Mr. Anthony follow:]

TESTIMONY OF CONGRESSMAN JOHN PAUL HAMMERSCHMIDT
in behalf of the Arkansas Basin Association
Subcommittee on Energy and Water Development
House Appropriations Committee
April 14, 1985

MR. CHAIRMAN, and Members of the Subcommittee: I certainly appreciate the opportunity to once again express to this distinguished panel my enthusiastic support for the Statement of the Arkansas Basin Association. As a long-standing Member of the Public Works and Transportation Committee's Water Resources Subcommittee, I am more convinced than ever that if we are to meet our national goals of maintaining adequate water supplies, a sound transportation system and flood protection for our citizens, we must rank water resources development as one of our highest national priorities and secure funding for the studies, plans, and projects which will work toward these important objectives.

The Arkansas Basin Association has consistently recognized the economic, social and industrial value that water resources development brings to the Arkansas River Basin. In the past, their persistence has been an essential force in reversing population losses and unemployment in the State, thereby creating a climate in which the area can contribute to the general welfare of the region and the entire country. Their central belief, and mine, is that continued proper utilization of our water resources is vital to the future economic growth of the area.

We have again completed another outstanding year on the McClellan-Kerr Waterway Navigation Project. In addition to navigation, this multi-purpose project includes additional flood control, and hydroelectric power generation. However, because the Little Rock Office of the Corps of Engineers has identified approximately eight problem areas in the final phase of construction, I would urge the subcommittee to approve continued construction authority for the McClellan-Kerr Waterway Navigation project until the Corps is able to satisfactorily resolve these important aspects of final development.

Mr. Chairman, the members of the Arkansas Basin Association share our concern about taking substantial and meaningful action to cut back the size of the federal budget. At the same time, they are concerned, as I am, about the expanded non-federal cost-sharing requirements which have the potential of only allowing communities that can afford upfront financing to participate in federal programs. We are afraid that economically disadvantaged communities will be unable to participate because they cannot meet the high and unrealisitc cost-sharing requirements. I would urge that Congress develop a cost-sharing program which will encourage the development of water resources while allowing all communities with a real need and potential for growth to participate in these federal programs.

As you will remember, in December of 1982, Arkansas and much of the lower Mississippi Valley was hit by several storms, tornadoes, and torrential rain. Many part of the state suffered damage and the economic costs were massive. In particular, extensive damage was done to Lock and Dam 2, which is so vital to navigation in that area. I would ask the subcommittee to support continued funding of the Arkansas River Basin Study, relating to the stability of Lock and Dam 2 so that the necessary action may be taken.

In the past I have testified in strong support of water resource management projects in the Arkansas River Basin and many others which are in the overall interest of the United States. I firmly believe those programs that have proven worthwhile and effective must be continued. Realizing that this is a time for austerity in the Federal budget, I urge the subcommittee to approve timely and adequate appropriations for such projects, which will provide both immediate and long-range economic benefits for all our citizens.

Lastly, I would like to commend this Subcommittee for its willingness in the past to make the proper investments in water resource development and strongly urge you to continue to show the same farsightedness in ensuring that we invest adequately today for our water supply and transportation needs of tomorrow.

Beryl Anthony, Jr
4-14-86

STATEMENT OF U.S. REPRESENTATIVE BERYL ANTHONY, JR.

Mr. Chairman, I am pleased today to support Mr. Wallace Gieringer who will testify on behalf of the McClellan-Kerr Arkansas River Navigation System. Mr. Gieringer is a resident of Pine Bluff, in my district. He is an active civic leader, Executive Director of the Pine Bluff-Jefferson County Port Authority, Chairman of the Arkansas River Basin Interstate Committee, and President of the Jefferson County Industrial Foundation. I fully endorse the requests and recommendations of Mr. Gieringer and the other spokesman for the McClellan-Kerr Arkansas River Navigation system.

The Arkansas River navigation system is the finest example of a fully developed inland waterway in the United States. The full potential of this major transportation will not be realized until well into the next century, but the economic developement of Arkansas, Oklahoma, and adjoining states will be greatly enhanced by the benefits of waterborne traffic.

Urgent project funding needs include continued support for continuation of authority for the McClellan-Kerr Arkansas River Navigation Project until the eight remaining problems identified by the Little Rock Corps of Engineers have been satisfactorily resolved. I urge continued funding for the Arkansas River Basin Study to resolve problems related to navigation as well as flood reduction and municipal, industrial, and agricultural water supply.

Of course, I support the continued necessary funding for operation and maintenance of the waterway by the Corps of Engineers. The specifics on particular meritorious projects in Arkansas, Oklahoma, Kansas, Missouri, and Colorado will be provided you by the witnesses. I certainly endorse these requests as well.

Mr. **Hammerschmidt**. Thank you, Mr. Chairman. I am delighted I was able to stay here long enough to appear before you.

Mr. **Bevill**. John Paul, I wouldn't want to miss your testimony ever.

I am sorry I missed your statement, but I will have the opportunity to read it in the record.

Mr. **Hammerschmidt**. Thank you, sir.

Mr. **Bevill**. Mr. Foster, the Chair recognizes you. We are delighted to have you with us.

Mr. **Watkins**. We have got some Oklahomans in the crowd, too. It is always great to have them here. I think Mr. Foster came from Kansas up in the northern part in Wichita. I express my appreciation to you all coming and being here.

Mr. **Bevill**. We are delighted to have you with us. We are also glad to have anybody from Oklahoma, especially.

Mr. **Foster**. Mr. Chairman, I am Jim Foster from Wichita, Kansas. I am Chairman of the Kansas Interstate Committee and I am employed by the Boeing Military Airplane Company in Wichita.

It is indeed a pleasure tc appear before your committee to make our views and recommendations to this distinguished body. The Arkansas Basin Interstate Commission consists of five delegations from each of the States in the basin, Kansas, Colorado, Arkansas, Oklahoma and Missouri, and we have representatives of those States here.

I would like at this time to have them stand so you might see that we do have delegates from all over.

Mr. **Bevill**. All five States.

Mr. **Foster**. All five States are represented.

Mr. **Bevill**. Glad to have each of you with us. I am sure you will want to put their names in the record showing that they have come to Washington.

Mr. **Foster**. There is a list of those present attached to the back of your statement which we ask be included in our record.

Mr. **Bevill**. That will be part of the record.

Mr. **Foster**. The Governors of each of our respective States appoint us to serve in this body and we meet annually at the Arkansas Basin Development Association annual meeting in Tulsa to review water projects and matters of importance to our State and to prepare recommendations for this committee.

The statement consists of two parts. One touches on policy matters and the other on construction of projects in our area and while we agree with members of Congress and several noted economists throughout the Nation that warn that the next major crisis facing us is a water crisis, we believe that this crisis will be enormous in comparison to the energy crisis which we just went through.

The Interstate Committee asks that you continue the authorization of construction funding for the McClellan-Kerr Navigation System. We still have eight remaining problems which have been identified by the Corps, but have not at this time been satisfactorily solved.

We ask that funding, the construction funding, be continued until such time as the Corps' experimental station at Vicksburg has finalized their studies and recommended solutions to all the problems.

Last year we spoke to you briefly, as well as this year, about nonfederal cost sharing. We urge Congress to recognize the existence of a national water crisis on the horizon and to attempt to avoid this crisis. We ask that the establishment of a national water policy, which recognizes the importance of water to the development of all aspects of our economy, be put in place and, lastly, that development of a cost sharing program which will encourage and develop the water resources of all areas of our country, not just those particular parts which can afford the upfront financing.

There are many areas of our Nation which have need for water projects and some of them are not able to handle the upfront financing. We recommend that in your deliberations—we realize that there are serious financial problems facing us and that at the beginning of most of the testimony in here we recognize the fact that budget restraints are necessary, however, we feel that the Nation is facing a serious water problem and that in the future sizeable expenditures will be needed to continue to enhance the tax basis of those areas through development of the economy and water projects.

The reductions of flood damage along most of the rivers in the States has been tremendous. Millions of dollars have been saved and we believe that this is a productive way in which to use Federal funding.

We would like to thank you very much for affording us the time to speak with you and we look forward to working with you and your colleagues on developing water policies and programs for the 1987 and beyond years.

[The statement of Mr. Foster follows:]

STATEMENT OF THE ARKANSAS RIVER BASIN INTERSTATE COMMITTEE

ARKANSAS-COLORADO-KANSAS-MISSOURI-OKLAHOMA

RELATIVE TO APPROPRIATIONS FOR THE COMPREHENSIVE DEVELOPMENT OF THE ARKANSAS RIVER BASIN

FOR

FISCAL YEAR 1987

TO

The Chairman of the Energy and Water Development Subcommittee
Appropriations Committee

United States Senate

*****

U. S. House of Representatives

BY

JAMES O. FOSTER

Chairman

Arkansas River Basin Interstate Committee

CONTENTS

Page

1. Statement of the Chairman of the ARKANSAS RIVER BASIN INTERSTATE COMMITTEE (Mr. James O. Foster). 1

2. Interstate Committee Members (Five States). 3

3. Arkansas Testimony - Mr. W. A. Gieringer. 4

Supporting Testimony:

A. Arkansas Basin Association

B. Others

4. Colorado Testimony - Mr. Charles L. Thomson. 6

5. Kansas Testimony - Mr. James O. Foster 9

6. Missouri Testimony - Mr. Gale A. Graham. 12

7. Oklahoma Testimony - Mr. Houston Adams. 13

Supporting Testimony:

A. City and County of Muskogee 16

8. Hearing Attendance 18

STATEMENT OF MR. JAMES O. FOSTER

CHAIRMAN

ARKANSAS RIVER BASIN INTERSTATE COMMITTEE

April 14, 1986

Mr. Chairman, I am James O. Foster from Wichita, Kansas, Chairman and spokesman for the Arkansas River Basin Interstate Committee. It is indeed our pleasure and honor to appear before you and the distinguished members of your Committee today.

The Arkansas River Basin Interstate Committee consists of five delegates from each of the states of Arkansas, Colorado, Kansas, Missouri and Oklahoma, who were appointed to represent those respective states by their Governors. It is their responsibility to coordinate water resource matters among the states, and to speak for the Arkansas River Basin in appearances before Committees of Congress and Regulatory Agencies. The Committee held its Annual Meeting in Tulsa, Oklahoma on March 6, and carefully reviewed policy and water project matters which had been previously considered by the individual states.

I am accompanied here today by members of the Interstate Committee, and without taking the time to introduce them, I would appreciate the opportunity to have them stand as a group, attesting to their unified support for our presentation. These gentlemen devote countless hours working on water resource matters in the individual states, and work harmoniously to coordinate programs which will enhance the economic viability in the entire Arkansas River Basin.

The first part of our statement has to do with policy matters and the second is to support continued construction of vital water resource management projects in the five Basin states. We feel it is absolutely essential, Mr. Chairman, to call these policy matters to attention of this Committee, because we agree with members of the Congress and noted economists throughout the Nation who warn that the next major crisis which will face this country will be a water crisis. Many feel it will make the energy crisis of the 1970's appear simple by comparison.

CONTINUATION OF THE CONSTRUCTION AUTHORITY FOR McCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM.

The Interstate Committee urges the continuation of authority for the McClellan-Kerr Arkansas River Navigation Project until the eight remaining problems identified by the Little Rock District Corps of Engineers have been satisfactorily resolved.

Low water levels of the Mississippi River have adversely affected navigation on the Arkansas which was not anticipated in the design anticipated in the design of the Arkansas Navigationway, but which have occurred due to deep degradation of the Mississippi. The Corps' Waterway Experiment Station at Vicksburg is still studying solutions to the problem.

NON FEDERAL COST SHARING

The Arkansas Basin Development Association, a volunteer organization which represents the five Arkansas River Basin States, unanimously adopted a statement in regard to non federal cost sharing. This policy statement has been given serious consideration by the Interstate Committee members, and we respectfully urge that this Congressional Committee carefully consider the recommendations as you develop policies for funding of absolutely essential water resource projects.

The ABDA urgently requests that Congress (1) recognize the existing danger of a national water crisis and take all actions necessary to avoid such a crisis; (2) establish a national water policy which recognizes the importance of water in the development of all aspects of our economy; and (3) develop a cost-sharing program which will encourage the development of the water resources in all areas of our country, not just in those parts of the nation which can afford up-front financing.

Finally, Mr. Chairman, we strongly support the statements of the individual states, wherein they request adequate funding for planning and construction of vital projects. Some recommendations are for the appropriations requested by the Administration in their 1987 budget requests and other states request funding for the full capability of the Corps and the Bureau. These recommendations are made with the full knowledge of the serious financial problems facing the Nation, and the strong desire to reduce federal expenditures wherever possible. We agree with that policy, but as mentioned in the beginning of my testimony, we do feel that the Nation is facing a very serious water supply problem. Funds invested today for multipurpose water projects will save sizeable expenditures in the future, and also enhance the tax base throughout the entire nation. The reductions in flood damage alone will save the federal and state governments millions of dollars and will help keep the water where is can be productively used.

Thank you very much, Mr. Chairman, for affording us this time, and we look forward to working with you and your colleagues as you develop water policies and programs for 1987.

March, 1986

THE ARKANSAS RIVER BASIN INTERSTATE COMMITTEE

FROM ARKANSAS:

W. A. Gieringer, Pine Bluff-Jefferson County Port Authority, Pine Bluff, AR - (State Chairman)
Wayne Bennett, Farmer and Businessman, Lonoke, AR
Charles Maynard, Sr., Vice President, Union National Bank of Little Rock, Little Rock, AR
Douglas W. Parker, Attorney, Ft. Smith, AR
Charles Steel, Sr., Vice President, Arkansas Power and Light Company, Little Rock, AR

FROM OKLAHOMA:

Houston Adams, Commissioner-Elect Water and Sewer Department City of Tulsa, OK - (State Chairman)
E. R. Albert, Jr., Albert Equipment Company, Tulsa, OK
Robert S. Kerr, Jr., Oklahoma Water, Inc., Oklahoma City, OK
Harold B. Scoggins, Muskogee, OK
Fred G. Turner, Consultant, McAlester, OK

FROM KANSAS:

James O. Foster, Business Management Coordinator, Boeing Military Airplane Company, Wichita, KS - (State Chairman) (Chairman of Interstate Committee)
Roger Brown, President, Home National Bank, Arkansas City, KS
Frank W. Liebert, Attorney, Coffeyville, KS
Taylor Peckham, Peckham Insurance Agency, Augusta, KS
Arthur T. Woodman, Woodman-Architects, Wichita, KS

FROM COLORADO:

Charles L. Thomson, General Manager, Southeast Colorado Water Conservancy District, Pueblo, CO - (State Chairman)
Lee H. Hancock, The High Line Canal Co., Rocky Ford, CO
John Javernick, Farmer and Rancher, Canon City, CO
William McDonald, Director, Colorado Water Conservation Board, Denver, CO
Ray D. Nixon, Colorado Springs, CO

FROM MISSOURI:

Gale A. Graham, Realtor, Charles Burt, Inc., Realtors, Joplin, MO - (State Chairman)
Ted B. Evans, Southwest Missouri Bank, Carthage, MO
Douglas Mahnkey, Attorney, Forsyth, MO
R. Layne Morrill, Realtor, Shepherd of the Hills Realty, Kimberling City, MO

Statement of
Wallace A. Gieringer, Chairman for Arkansas
Arkansas River Basin Interstate Committee
to
The Chairman of the Energy and Water Development Subcommittee
Appropriations Committee

United States Senate
*****
U.S. House of Representatives

Relative to Appropriation for the Comprehensive Development
of the Arkansas River Basin for FY 87

Mr. Chairman and members of the Committee, my name is Wallace Gieringer. I serve as Executive Director of the Pine Bluff-Jefferson County Port Authority and Arkansas Chairman of the Interstate Committee. Other Committee members representing Arkansas are Messrs. Wayne Bennett, farmer from Lonoke; Charles Maynard, banker from Little Rock; Douglas W. Parker, attorney from Fort Smith; and Charles L. Steel, electric utility executive from Little Rock. We fully endorse the statement presented to you today by the Chairman of the Arkansas River Basin Interstate Committee.

We strongly believe federal water resource investments serve as "investment seeds" which are a catalyst for self-sustaining investment of private capital in achieving long-term economic growth of our nation. Let us identify certain projects vital to the economic well-being of our area. We recommend and wish to emphasize the necessity of the following:

- support for all funding for the Corps of Engineers which has been included in the President's budget for the McClellan-Kerr Arkansas River Navigation System;
- continuation of authority for the McClellan-Kerr Arkansas River Navigation Project until the eight remaining problems identified by the Little Rock District Corps of Engineers have been satisfactorily resolved;
- funding to continue the urgently needed Arkansas River Basin Study to resolve problems related to navigation as well as flood reduction and municipal, industrial and agricultural water supply;
- your support of Corps authorization and funding of off-channel harbors in accordance with "Economic and Environmental Principles and Guidelines For Water and Related Land Resources Implementation Studies" (dtd March 1983) for regular feasibility and Section 107 navigation projects;
- funding the North Little Rock, Arkansas, flood control study and the Arkansas River Basin Chloride Control study;

- your insistence that hydropower development along the waterway be with Corps' control of design, construction and operation; and

- funding the Corps for an operational study to develop a model to be used to establish the amount of water available for power at each lock and dam in order that the Corps may insure that water needed to maintain the authorized navigation will be available.

We continue to share your concern about decreasing the absolute level of the Federal Budget. At the same time, we are concerned that with expanded non-federal cost-sharing requirements only wealthy communities will be able to participate in federal programs. The poorer areas with real need, and often with greatest potential for growth, will be unable to participate because they can't meet high and unrealistic cost-sharing requirements.

We thank you for the opportunity of speaking to you today and urge you to favorably consider our requests.

CHAIRMAN
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APPROPRIATIONS COMMITTEE
UNITED STATES SENATE
WASHINGTON, D.C.

Mr. Chairman, and members of the Committee, my name is Charles L. Thomson, and I am General Manager of the Southeastern Colorado Water Conservancy District, with headquarters in Pueblo, Colorado. I submit this statement today in behalf of the other four members of the Colorado delegation, who were appointed by our distinguished Governor, the Honorable Richard D. Lamm. My colleagues are: Mr. John E. Javernick, farmer and rancher from Canon City, representing the Upper Arkansas Basin in Colorado; Mr. Lee Hancock, retired Superintendent, High Line Canal Company near Rocky Ford, a farmer representing the Lower Arkansas Basin; Mr. William McDonald, Director, Colorado Water Conservation Board, and Mr. Raymond D. Nixon, retired Executive Director, Department of Public Utilities for the City of Colorado Springs, representing the municipal and domestic water users in the basin. We are truly honored today, Mr. Chairman, to join our colleagues from the other great States of Arkansas, Missouri, Oklahoma and Kansas, who make up the Arkansas River Basin Interstate Committee, and appear before you as a unified group respectfully requesting appropriations for necessary water resource projects in our five states.

The members of the Colorado delegation respectfully recommend the approval of the appropriations budget submitted by President Ronald Reagan for the U.S. Army Corps of Engineers and the U.S. Bureau of Reclamation Projects in the State of Colorado. Mr. Reagan recommends the following for continued construction on the Fryingpan-Arkansas Project in FY 1987:

Construction	$5.513 million
O & M	$1.824 million

The construction funds provide for the removal of temporary dikes at Twin Lakes Reservoir, and will permit essential construction to continue on recreation facilities and a new fish hatchery complex and permanent operating facilities at Pueblo Reservoir. Pueblo Reservoir has become one of the most heavily used water recreation areas in Eastern Colorado, due to the fact that similar facilities in the Denver Metropolitan area are unable to accommodate the increasing population, and people from that area and Colorado Springs are regular boaters, fishermen, campers and sightseers. The fish hatchery, which is well under construction, is absolutely essential to not only meet the ever growing demands at Pueblo Reservoir and other Fry-Ark Project facilities, but also other reservoirs and streams in the State of Colorado. Recreation is truly one of Colorado's most important industries, and attract people from all over the United States and the world.

We also respectfully recommend the appropriations in the budget submitted by President Reagan for the U.S. Army Corps of Engineers, which includes:

Arkansas River above John Martin Dam---------------------------$735,000
This will provide funds for continued surveys of essential flood control and water management projects in the area above the Colorado-Kansas Stateline, and the City of Pueblo. This is an area that is always vulnerable to devastating floods, and the Corps of Engineers is working cooperatively with the State of Colorado and local irrigation companies to develop plans to prevent floods and provide better management of the waters.

Fountain Creek and Tributaries North of Pueblo--------------------$210,000
This is an area between the Cities of Colorado Springs and Pueblo, which is also vulnerable to devastating floods. The massive flood of 1965 originated in this area, and the Corps is presently working with the City of Colorado Springs, and other governmental entities in the area, to develop plans for programs and projects which will alleviate such floods in the future.

Fountain Creek Flood Control Project at Pueblo
Mr. Chairman, last year Mr. Reagan requested $1.36 million, and designated this one of 12 new starts for FY 1986. We strongly recommended the appropriation of that amount of money, because the City of Pueblo had agreed to the essential cost sharing, and the project is absolutely essential to prevent serious of loss of property and human life in downtown Pueblo if it is not constructed. Your Committee supported our request, and other appropriate Committees of the House included the project in the Authorizing Legislation later in the year. We regret that similar action was not taken in the Senate, but we are pleased that the project is included in legislation being considered by the Senate at this time, and we urge that this project be included in the Conference Committee final report.

We understand that the Corps of Engineers has retained a capability of $1.36 million to initiate the project when it is authorized by the Congress, and final arrangements for cost sharing are worked out with the appropriate governmental agencies in Colorado. We feel, Mr. Chairman, that this particular project fits into the cost sharing philosophies of the administration, and will be an excellent example of the ability of the Corps of Engineers and local agencies to construct a much needed multi-purpose flood control project.

John Martin O & M--$1.060 million

Trinidad Lake O & M--$519,000

Mr. Chairman, and members of this very distinguished Committee, we again want to thank you for the sincere and dedicated manner in which you have permitted those of us who deal in water resource management on a day to day basis to appear before you to present our recommendations regarding appropriations for water resource projects in the five Arkansas River Basin States. You, and those who have served on this important Committee in the past, have created an enviable record in appropriating necessary funds down through the years, which have created dams, reservoirs and waterways, and other means of conveyance for necessary water supplies, which have made the United States great. We would dread to think what this country would be like, both environmentally and economically, had it not been for your wisdom and dedication. We truly hope this philosophy will continue in the years to come when the needs may not be there for massive projects as in the past, but for projects such as are described and requested in our testimony today.

STATEMENT OF JAMES O. FOSTER
CHAIRMAN, KANSAS INTERSTATE COMMITTEE
THE ARKANSAS RIVER BASIN
TO
CHAIRMAN
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APPROPRIATIONS COMMITTEE
UNITED STATES SENATE
******
U. S. HOUSE OF REPRESENTATIVES

Mr. Chairman and members of the Committee, my name is James O. Foster. I am Business Management Coordinator for the Boeing Military Airplane Company, Wichita, KS and Chairman of the Kansas Governor's Interstate Committee for the Arkansas River Basin. I am pleased to submit this statement today on behalf of myself and the other members of the Kansas Delegation who were appointed to represent the State of Kansas by the Honorable John Carlin, Governor.

My colleagues are Mr. Arthur T. Woodman, Architect, Wichita; Mr. Frank Liebert, Attorney-at-Law, Coffeyville; Mr. Roger Brown, Bank Executive, Arkansas City; Mr. Taylor Peckham, Insurance Executive, Augusta, Kansas. We are honored to join with our colleagues from the great State of Arkansas, Colorado, Missouri, and Oklahoma in appearing before you today to put forth our views on the appropriations and projects in Kansas and the Arkansas River Basin.

The Appendix lists the projects in the Kansas portion of the Arkansas River Basin. The figures are those in the President's budget which the Kansas Interstate Committee fully agree with and request that funding be granted.

I would like to call your attention to two construction projects which are particularly important to Kansas. The Great Bend Flood Control Project is most important to stop flooding of a major city in the western portion of Kansas. The Halstead Project is also an important project because Halstead is vital to the surrounding areas. This city contains a major regional hospital which provides medical services to the surrounding farming community. S. 1567 which is now making its way through Congress contains funding for both the Halstead and Great Bend projects. I would also like to call your attention to the Douglass Lake Project which is important because it contains the possibility of being a major municipal and industrial water supply in the future. It could assist not only the City of Douglass; but also Augusta, Newton, Winfield, and Arkansas City with a critical water supply for their continued growth. Growth of South Central Kansas could well depend on the Douglass Lake Project.

Mr. Chairman and members of the Committee, we wish to thank you for the sincerely dedicated manner in which you and your distinguished colleagues in the congress of the United States have dealt with the Water Resources Programs in allowing us to present our views and recommendations to you. We look forward with great expectations and hope for the future of water resource development in Kansas; with your assistance, it can be achieved.

KANSAS INTERSTATE COMMITTEE RECOMMENDATIONS
FISCAL YEAR 1987
ARKANSAS RIVER BASIN IN KANSAS

Project	Type of Project	Surveys	Advance Engn and Design	Construction	Operations & Maintenance
Kansas					
Arkansas River & Tribs. Great Bend, KS to Tulsa, OK	FDP	600,000			
Blue River Basin, KS	FDP	200,000			
Clinton Lake, KS	FC				1,198,000
Council Grove Lake, KS	FC				702,000
Douglass Lake, KS	FC		265,000		
El Dorado Lake, KS	FC				415,000
Elk City Lake, KS	FC				560,000
Fall River Lake, KS	FC				645,000
Grand Neosho River, KS	FDP	600,000			
Great Bend, KS	FC			2,600,000	
Halstead, KS	FC			1,100,000	
Hillsdale Lake, KS	FC				581,000
John Redmond Dam & Reservoir, KS	FC				875,000
Kanopolis Lake, KS	FC				1,670,000
Marion Lake, KS	FC				691,000
Melvern Lake, KS	FC				1,187,000
Milford Lake, KS	FC				1,784,000
Pearson - Skubitz Big Hill Lake, KS	FC				713,000
Perry Lake, Ks	FC				1,284,000
Pomona Lake, KS	FC				1,088,000
Toronto Lake, KS	FC				238,000
Turkey Creek Basin, KS	FDP	310,000			
Tuttle Creek Lake, KS	FC				2,990,000
Wilson Lake, KS	FC				1,707,000
Winfield, KS	RDP	50,000			

Statement of
Gale A. Graham, Chairman for Missouri
Arkansas River Basin Interstate Committee
Relative to Appropriation for the Comprehensive Development
of the Arkansas River Basin
for FY 87
to
The Chairman
Sub-Committee on Energy and Water Development
Appropriations Committee
United State Senate
****
U.S. House of Representatives

Mr. Chairman and members of the Committee, I am Gale A. Graham, retired banker and active Realtor from Joplin, Missouri. I am chairman of the Missouri members of the Arkansas River Basin Interstate Committee. My Colleagues are: Mr. Ted B. Evans, banker from Carthage, Missouri; Mr. Douglas Mahnkey, Attorney from Forsyth, Missouri; and Mr. Layne Morrill, Realtor from Kimberling City, Missouri. We represent the Southwest corner of Missouri, which is part of the Arkansas River Basin. We are honored to join our colleagues from Arkansas, Kansas, Oklahoma and Colorado in appearing before you and certainly appreciate the time afforded us to testify collectively in support of appropriations for projects along the entire reach of the Arkansas River.

We request the Planning for Prosperity Lake continue and we support and urge your favorable consideration of all the projects in the Arkansas River Basin as listed on the appropriation request summary which is being presented today by the Chairman of the Arkansas River Basin Interstate Committee.

We have testified each year for many years concerning the importance of water resource management projects in the Arkansas River Basin and many others which are in the overall interest of the people in our area.

We are greatly appreciative of your consideration of our needs in the past and solicit your favorable consideration of the request as presented here today, and we sincerely thank you for the opportunity to present them.

STATEMENT OF

HOUSTON ADAMS

CHAIRMAN FOR THE STATE OF OKLAHOMA ARKANSAS RIVER BASIN INTERSTATE COMMITTEE

APRIL 14, 1986

Mr. Chairman and members of the Committee, I an Houston Adams, Commissioner-Elect of the Water and Sewer Department of the City of Tulsa and Oklahoma Chairman of the Arkansas River Basin Interstate Committee, from Tulsa, Oklahoma.

It is my privilege to present this statement on behalf of the Oklahoma members of the Committee in support of adequate funding for water resource projects in our area of the Arkansas Basin. Other members of the Committee appointed by our Governor, the Honorable George Nigh, are: Mr. E. R. Albert, Jr.; Mr. Robert S. Kerr, Jr.; Mr. Harold B. Scoggins, and Mr. Fred G. Turner.

Together with representatives of the other Arkansas Basin States, we fully endorse the statement presented to you today by the Chairman of the Arkansas River Basin Interstate Committee.

We appreciated the opportunity to present our views of the special needs of our State concerning several studies and projects.

We are pleased that the President included in his budget message for FY 1987 $5,900,000 in funds for the continued construction of Arcadia Lake, Oklahoma, and the $2,000,000 in comprehensive and flood damage prevention studies on the Arkansas river and tributaries. We urge that on authorized projects in Oklahoma, the study capability of the Corps of Engineers be funded in order to complete or to advance study completion.

We support all of the appropriation requests in the Federal Budget for the Arkansas River Basin.

There are seven projects omitted from the Federal Budget that, in our opinion, are critical to the continued development of water resources in Oklahoma. We are requesting the Committee add the projects and funding outlined herein.

After years of delay on new project authorizations, we again express our concern that many recommended projects will not be funded due to the lack of "up front" funding by local interests and, therefore, deleted from the budget request.

We again urge flexible financing arrangements that allow a partnership of federal, state and local governments with the private sector, and "fair share" determinations made based on the project involved. Realistic cost allocations must be developed based on intermodal equity and public value aspects considered in order to arrive at the "fair share." The Federal Government must join as a major partner in planning, design and construction.

Another concern is that the large-scale design, engineering, and construction management capabilities of the Corps of Engineers is deteriorating due to the lack of new starts which materially affects their preparedness for their role in mobilizing for a national emergency.

We appreciate the concern the Subcommittee has shown in the past regarding a drastic reduction in funding water resource development in this country. We support and encourage continued water development in to order to assure adequate resources for America's future growth and prosperity.

Pending authorizing/financing legislation is in many ways encouraging. However, if the cost of new project authorizations is cost-sharing and higher fees on users to the point that some areas of the country cannot participate, then have we progressed? We urge sound policies for the future of navigation and water resources management programs.

We thank the distinguished Committee for the opportunity to present our views on Oklahoma's FY'1987 water development requirements.

FY 1987

OKLAHOMA -- In Addition to President's Budget	
PROJECT	Funds Requested To:
1. Arkansas Basin Chloride Control Project	Continue Advance Engineering and Design
2. Arkansas River Municipal, Industrial and Agricultural Study	Continue Study
3. Arkansas-Red River Basin Solar Energy Investigation	Continue Study
4. Big and Little Sallisaw Creek Navigation Project	Initiate Construction
5. Candy Lake	Continue Construction
6. Chikaskia Lake (OK-KS)	Initiate Advance Planning
7. Sand Lake	Continue Advance Engineering and Design

CHAIRMAN
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APPROPRIATIONS COMMITTEE

WASHINGTON, D.C.

On behalf of citizens of the City and County of Muskogee, Oklahoma, The Greater Muskogee Area Chamber of Commerce and The Greater Muskogee Development Corporation we endorse and approve the action of the Arkansas River Interstate Committee and its members in presenting their request for appropriations to continue development of the natural resources in the Arkansas River Basin.

We also endorse the full 1985-1986 Platform and Program on public works as adopted by the Arkansas Basin Development Association.

We are opposed to the closing of the construction authorization for McClellan-Kerr Arkansas River Navigation System.

We request that Congress (1) recognize the existing danger of a national water cirsis and take all actions necessary to avoid such a crisis; (2) establish a national water policy which recognizes the importance of water in the development of all aspects of our economy; (3) develop a cost-sharing program which will encourage the development of the water resources in all areas of our country, not just in those parts of the nation which can afford up-front financing.

We urge this committee to oppose any consolidation of the Interior Bureau of Reclamation with the Army Corps of Engineers. Recent studies indicate that this consolidation is not justified.

We oppose the 1.5 mills/ton mile use fee. Although we recognize the need to reduce the burden of the Federal budget, we urge you to go slow in placing the full cost on local entities by limiting new cost sharing to limited in-kind contributions, which we believe to be an appropriate compromise on this item.

We want to thank you for this opportunity to appear before you as you have always been most gracious to us. We look forward with great expectations and hope for the future of water resources development; with your assistance, it can be done.

ARKANSAS RIVER BASIN

INTERSTATE COMMITTEE

April 14, 1986

Energy and Water Development Subcommittee,
Appropriations Committee

U.S. House of Representatives
***
United States Senate

IN ATTENDANCE

Aubrey Blanks - Alderman, North Little Rock, AR

Raymond Burnett - Director, Waterworks Department, North Little Rock, AR

Coleman Fite - Director, Arkansas Basin Development Association; Vice President, First National Bank & Trust Muskogee. OK

James O. Foster - Chairman, Interstate Committee; Director, Arkansas Basin Development Association; Business Management Coordinator, Boeing Military Airplane Company, Wichita, KS

W. A. Gieringer - Arkansas Chairman, Interstate Committee; Director, Arkansas Basin Development Association; Executive Director, Pine Bluff-Jefferson County Port Authority, Pine Bluff, AR

Tom W. Jolly - Executive Vice President, Arkansas Basin Development Association, Tulsa, Oklahoma

Charles D. Maynard - Interstate Committee; Director, Arkansas Basin Development Association; Sr. Vice President, Union National Bank, Little Rock, AR

Barry McKuin - President, Arkansas Basin Association; Winrock Farms, Inc., Morrilton, AR

E. L. Morris - President, Arkansas Basin Development Association; Project Manager, Rockwell International, Tulsa, OK

Howard V. Osborne - Secretary-Treasurer, Arkansas Basin Development Association; President, Osborne Company, Tulsa, OK

Taylor Peckham - Interstate Committee; Director, Arkansas Basin Development Association; Peckham Insurance Co., Augusta, KS

Robert W. Portiss - Director, Arkansas Basin Development Association; Port Director, Tulsa Port of Catoosa, Catoosa, OK

Harold B. Scoggins - Interstate Committee; Director, Arkansas Basin Development Association; Muskogee, OK

Rudy Szewczak - Executive Vice President, Muskogee Chamber of Commerce, Muskogee, OK

INTERSTATE COMMITTEE

Attendance Continued

Charles L. Thomson - Colorado Chairman, Interstate Committee; Director, Arkansas Basin Development Association; General Manager, Southeast Colorado Water Conservancy District, Pueblo, CO

Donal Venhaus - County Judge, Pulaski County Arkansas, Little, Rock, AR

Arthur T. Woodman - Interstate Committee; Director, Arkansas Basin Development Association; Woodman-Architects, Wichita, KS

Mr. **Bevill**. Very good. Thank you very much.

Are there any other statements to be made?

Mr. **Gieringer**. My name is Wally Gieringer. I serve as chairman of the Arkansas Commission of Interstate Committee. There is one point in our testimony I think is important, not only the Arkansas River, the Mississippi, but now the Tennessee-Tombigbee, as well. We together recommend that you continue your support for Corps authorization and funding of off-channel harbors.

There seems to be an effort to do away with this and the development of off-channel harbors is crucial to the continuing development of the inland waterway system itself, both under the regular feasibility type developments as well as under Section 107 navigation projects.

We specifically appreciate the opportunity to call that to your attention and seek your assistance.

Mr. **Bevill**. That is very true. Thirty-five percent, as you know, 35 percent of the bulk transport freighters, or whatever, in the world cannot even enter and cannot load and get out of any port in the United States.

So that tells us something. It is critical we move on them and we are going to. This subcommittee is very interested in that. That is a good point.

Mr. Thomson, we will be glad to hear from you.

Mr. **Thomson**. Mr. Chairman, I appreciate the opportunity to join my distinguished friends from the other four States and I also want to thank you very much, sir, for taking time a month ago to come to Colorado. I know of your interest and all of your colleagues' interest in this matter of cost sharing.

Mr. **Bevill**. I enjoyed that good southern hospitality in Colorado.

Mr. **Thomson**. That is as far south in Colorado as you can get except when you get into northern Arizona and then you are in Congressman's Rudd's territory. Again, this cost sharing is terribly important.

We are realists. We understand the economy and the economics facing the Nation and we still put water as number one, sir.

Thank you.

Mr. **Bevill**. Very good. Mr. Rudd is not going to let us forget. When we start marking up this bill we will be hearing from him. He is always very supportive and the subcommittee is, too.

Thank you very much for a very fine statement.

Monday, April 14, 1986.

NAVAJO RESERVATION FLOOD CONTROL STUDY

WITNESSES

PABLITA T. ABEYTA, STAFF ASSISTANT, THE NAVAJO NATION

ROSEMARY KNOKI, NAVAJO TRIBE

Mr. **Bevill**. Mr. Erie Eberhard, your prepared statements will be made part of the record. You may proceed as you wish.

Ms. **Abeyta**. Mr. Chairman, members of the committee, my name is Pablita Abeyta. I am here to present testimony on behalf of the

Navajo Nation to request funding for a reservation-wide survey of flood control and related purposes.

I know my time is limited so I will try and summarize my statement.

The President of the United States has never requested funding under existing authority to address flooding problems on the Navajo Indian Reservation. In 1976, the Congress enacted the Water Resources Development Act and Section 176 of the Act directed the Army Corps of Engineers to conduct a survey of flood control and allied purposes on our reservation.

Until such time as Congress appropriates funds to conduct required studies, the Corps will be unable to fulfill this directive.

Some members of Congress, the President and the Secretary of the Army, are fully aware of the severe flooding problems on the Navajo Indian Reservation which result in extreme bank erosion, threatening earthen dams, degragation of commercial sites caused by unsuccessful embankment practices, endangering dams, highways, roads, bridges, endangering a national historic site, creating great hardships for the Navajo people who must cross numerous washes throughout the reservation to reach their homes, to attend schools, and to reach hospitals.

In addition, annual flooding causes hardship on local residents in flood plain areas often making rural transportation impossible. These problems have built up over the years and escalated to a point of complex flooding problems and large scale runoff.

To date, the cumulative damages and chain of serious degradation for land and lives is not unlike recent torrential flooding in California reportedly causing the Corps to exceed fiscal year 1986 appropriations by an estimated $5 million.

Our review of preliminary information of our five major drainage areas indicates six large earthen dams are no longer capable of fully controlling a 50 to 100 year storm event and we are quite concerned.

Due to diversity and the location of many Indian reservations, we feel that Indian lands are generally overlooked. That is why we are here today to request that funds be appropriated beginning in fiscal year 1987 for a general flood control reconnaisance study in the amount of $470,000. This study would take 12 to 18 months to complete.

The Navajo Nation has committed to cost share 50 percent of the estimated cost of Phase II, feasibility studies, which would detail water resource opportunities on our reservation and allow us to recommend feasible projects for possible construction in the future. Phase II is estimated to cost approximately $1.5 million.

Completion of these studies would provide the basis for beginning to protect and enhance existing environmental and cultural resources. Recreational and agricultural facilities at strategic locations on our reservation would be identified.

Many of these activities might generate employment of the local people. If carefully planned, water resource management would be coupled with range management and soil conservation measures and stop the run-away erosion now plaguing our lands.

That is the crux of our summary. I request our entire testimony be made part of the record and I would be happy to answer questions anyone may have.

[The statement of Ms. Abeyta follows:]

TESTIMONY OF THE NAVAJO NATION

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS

April 14, 1986

INTRODUCTION

Mr. Chairman and members of the Committee, I appreciate this opportunity to present testimony on behalf of the Navajo Nation to request funding of a reservation-wide survey of flood control and related purposes.

SUMMARY OF THE REQUEST

The President of the United States has never requested funding under existing authority to address flooding problems on the Navajo Indian reservation. In 1976, the Congress enacted the Water Resources Development Act, and Section 176 of the Act directed the Army Corps of Engineers to conduct a survey of flood control and allied purposes on our reservation. Until such time as Congress appropriates funds to conduct required studies, the Corps will be unable to fulfill this directive.

The Navajo Reservation experiences severe flooding problems during the Summer rainy season and during the Spring snowmelt. Erosion caused by the flooding is endangering a national historic site, creating great hardships for the Navajo people who must cross numerous washes throughout the reservation to reach their homes, to attend schools, and to reach hospitals. Our highways, roads, and bridges are being eroded. These serious problems are not being addressed, due in part, to the lack of baseline data to allow the work to be done.

We respectfully request that funds be appropriated beginning in Fiscal Year 1987 for a general flood control reconnaissance study in the amount of $470,000. This study would take 12-18 months to complete. The Navajo Nation has committed to cost share 50% of the estimated cost of Phase II, feasibility studies, which would detail water resource opportunities on our reservation and allow us to recommend feasible projects for possible construction in the future. Phase II is estimated to cost $1,500,000.

Completion of these studies would provide the basis for beginning to protect and enhance existing environmental and cultural resources. Recreational and agricultural facilities at strategic locations on our reservation would be identified. Many of these activities might generate employment for the local people. If carefully planned, water resource management would be coupled with range management and soil conservation measures and stop the run-away erosion now plaguing our lands.

NAVAJO NATION CHARACTERISTICS

The Navajo Nation is the largest Indian reservation in the United States comprising about 16 million acres that stretches across Arizona, Utah and New Mexico, with the largest portion being in Arizona. Because our reservation is situated in three states, we historically have experienced the need for extensive coordination with myriad Congressional districts, county districts, and Federal districts/agencies. For instance, at the Congressional level we are required to coordinate with Arizona's third and fourth districts, Utah's third district and New Mexico's third district. The Federal level requires contact with the Corps' Amarillo district office for the New Mexico portion, while portions of Arizona is split between the Los Angeles and Sacramento district offices, and Utah lies within the Sacramento district office. At the local level six counties occupy large segments of Navajoland as follows: Coconino, Apache, and Navajo counties in Arizona; McKinley and San Juan counties in New Mexico; and San Juan County in Utah.

As you might imagine, this can be quite confusing in the context of addressing and financing flood control and water resource problems. This multi-jurisdictional situation resulted in little or no assessment of flood inundation, water supply, and bank erosion in the Navajo Nation.

These problems have built up over the years and escalated to a point of complex flooding problems and large scale run-off. To date, the cumulative damages and chain of serious degredation to the land and lives is not unlike recent torrential flooding in California reportedly causing the Corps to exceed Fiscal Year 1986 appropriations by an estimated $5 million. Our review of preliminary information of our five major drainage areas indicates six (6) large earthen dams are no longer capable of fully controlling a 50-100 year storm event, and we are quite concerned.

We must also note that the increasing population of the Navajo Tribe continues to be a factor in projecting our future needs and use of the land. Approximately 160,000 Navajo people live on the reservation. The annual rate of population growth is estimated at 2%. We anticipate a considerable amount of population growth in communities such as Shiprock, Chinle, Tuba City, Kayenta, Window Rock and Crownpoint, all of which are located within the five drainage areas.

If funded, we recommend that one of the Corps district offices be designated as the lead office for servicing of the entire reservation which we previously indicated includes the Corps' Los Angeles, Sacramento, and Amarillo district offices.

GENERAL INVESTIGATION STUDY

On February 26, 1986, the Corps' South Pacific Division requested a budget in the amount of $10.9 million for the general investigations program for the current year. One of these studies would cost $5.8 million. We ask only a fraction of such amounts for a reconnaissance study in the amount of $470,000 which would permit us to vigorously pursue our reconnaissance study.

Some members of Congress, the President, and the Secretary of the Army are fully aware of severe flooding problems on the Navajo Indian reservation resulting in: stream bank erosion, threatened earthen dams, degredation of commercial sites caused by unsuccessful embankment practices; endangering highways, roads, bridges, schools and archaeological sites. In addition, annual flooding causes hardships on local residents in flood plain areas often making rural roads impassable. In some cases during peak flooding periods, lives have been lost to flash floods and bridge washouts.

Congress is very cognizant of the situation as evidenced by the passage of "The Water Resources Development Act" on October 22, 1976 (Public Law 94-587). In Section 176 of the Act, the Corps was authorized to conduct flood control investigations on the Navajo Indian reservation. The passage of this legislation has obviously not compelled the Corps or the President of the United States to request the necessary financial assistance under the provisions of the Act. Now, ten years later, we remain without the comprehensive mapping of our drainage areas needed to begin establishing our priorities and water resources conservation/preservation measures.

We recognize that the Corps has tried to stretch limited resources since 1984 in dealing with various uncontrolled flood and allied problems in the Navajo Nation. At best, this has been a piecemeal approach due to budgetary and other resource constraints. The band-aid type of work and preliminary studies completed include identification of six (6) outdated dams located on the reservation: Ganado, Tsaile, Many Farms, Round Rock, Wheatfields, and Red Lake. Apparently, the Corps has done some minor stream channelization studies in the Chinle Wash Area. Within a month, the Phoenix office expects to release a preliminary flood inundation reduction report for a multi-purpose dam and channelization in the Ganado Wash Area. Along the Little Colorado River area, extensive damage to roads and bridges around the Birdspring-Leupp community has been identified. A Section 14 review is in progress in Nazilini, Arizona. Finally, the Corps has assisted in identifying five (5) major drainage areas for further study: three in Arizona (Chinle Wash, Pueblo Colorado, and Little Colorado River) and two in New Mexico (Rio Puerco, and the Eastern Portion of the Chuska Mountains).

While these brief reviews have been completed or initiated, much work lies ahead. Lack of necessary appropriations have precluded an in-depth survey for flood control and allied purposes on our reservation. We have discussed the problems for ten years, it is now time to take action to finance the urgently needed reconnaissance study which would optimistically result in construction and/or upgrading of dams, channels and related improvements by 1996. This was succintly explained to us by Corps officials on October 12, 1984.

> "If funds are appropriated for this study, the Corps would initiate a reconnaissance study at 100 per cent Federal cost to define the water resource problems and identify potential solutions... The reconnaissance study would determine whether or not planning should proceed further into a feasibility phase. The objective of the feasibility phase is to study in more detail the water resource [construction appropriation] by Congress."

We have been referred to Congress by the Corps and therefore request financial assistance under existing authority of the 1976 Act, Section 176 as summarized below. We note that we are prepared to cost share Phase II at a 50 per centum level:

Budget Request to Congress - A Summary

	Current FY 1987	Out Years 1988-1990	1996
PHASE I (Reconnaissance Studies) 12-18 months; 100% Federal fund; justified projects established; report & recommend for Phase II.	$470,000		
PHASE II (Feasibility Studies) 50/50 cost share by the Navajo Tribe and the Federal Government; justified projects identified; report and request for construction funds submitted to Congress.		$1,500,000	
PHASE III (Construction) Capitalization estimates are established in the feasibility report.			Unknown

BENEFIT COST RATIO ANALYSIS

In the absence of specific Corps policy on benefit cost analyses on Indian reservation lands, we respectfully request the Congress to revise benefit cost ratio computations.

In the February 27, 1985, deliberation of this Committee, the following question was discussed by members: "Will Indian flood control projects be subject to the same...cost benefit ratio analysis as non-Indian projects?" At that time, the significance of this important question was revealed. That is, the usual benefit cost analysis employed by the Corps was apparently intended for robust economic regions of the United States which include densely developed counties such as Los Angeles County, California; along navigable rivers, waterways, and ports such as those of the Mississippi; and involving thousands of properties such as in Marin County, California, containing about 3,000 properties valued at an estimated $250 million.

Such areas are not comparable to the Navajo Indian reservation, an economically depressed area with high unemployment and reduced growth. This contrast requires a new look at the benefit cost computations for flood control and related projects on Indian lands.

CONCLUSION

Mr. Chairman, this concludes our testimony. We thank you and the members of the Committee for this opportunity to express our views.

Mr. **Bevill**. I don't believe there are any questions.

Thank you very much for a very fine statement. We will work with you the best we can.

Ms. **Abeyta**. Thank you.

Monday, April 14, 1986.

UPPER MISSISSIPPI RIVER PROJECTS

WITNESSES

WILLIAM H. KLINGNER, PRESIDENT, UPPER MISSISSIPPI FLOOD CONTROL ASSOCIATION

DONALD C. McCONNELL, VICE PRESIDENT

WILLIAM J. PIEPER, VICE PRESIDENT

MICHAEL KLINGNER

Mr. **Bevill**. Next is Mr. Klingner. Your prepared statement will be made part of the record and you may proceed as you wish.

Mr. **Klingner**. Thank you, Mr. Chairman. We wish to thank you for the courtesy extended to us to make a brief statement. In the interest of time, I will just extemporaneously speak about the various projects we have. We submitted our written testimony for the record.

First, let me introduce the members of our delegation who are here with us.

Mr. **Bevill**. All right.

Mr. **Klingner**. We have Mr. Donald C. McConnell who is Vice President representing Missouri. We have Mr. William J. Pieper, Vice President of our organization representing Iowa. We have Michael Klingner, consulting engineer with my firm, from Illinois. Mr. Kinscherff, who represents Illinois, at the last moment had a death in the family and was not able to come.

Mr. **Bevill**. All right.

Mr. **Klingner**. We are very sorry about that.

Mr. **Bevill**. We are pleased to have each of you gentlemen with us.

Mr. **Klingner**. If you refer to the map that I have given you, on the back part you will note three areas indicated in red. Those are the projects that the Corps of Engineers recommended be modified and upgraded. They resulted from the Coon Rapids Dam to the mouth of the Ohio River dam projects review which was requested by Congress.

We were very happy to learn that the South Quincy drainage and levee district in Illinois is included in the President's budget for fiscal year 1987. We are hopeful that that may mean that there is a feeling on the part of the Administration and Congress that some water resources projects might possibly be funded under the restraints in which Congress is trying to carry out.

At least we see some merit and some hope. I think we have been appearing here since 1969 talking about these projects. The Greenbay levee and drainage district project is not funded but it is included in the House bill, H.R. 6. It is included in the Senate bill recently passed.

It has been recommended by the Corps of Engineers to be upgraded to a 500 year flood frequency, but when it reached OMB they rejected it or made the statement that 500 year flood frequency design covering agricultural areas was not appropos, and, further, there was not a chemical, but a fertilizer plant within the area which should take care of its own pollutants.

The sponsor has no objection whatsoever to a project of a 200 year flood frequency which was originally the concept but the Board of Engineers of Rivers and Harbors took a look at it and said, hey, we can upgrade this to a 500 year with a very small reduction in benefit cost ratio, in fact, from about 1.5 to 1.3.

We ask your committee and Congress to take a look to see if you can initiate continuing planning and engineering to take another look at the original concept. As it now stands, there has been no funding and it is dormant.

Many, many years of planning went into this and we are just one step away from completing the planning, and determining if it is a feasible project or if it is not, if it is ready for authorization and appropriation. The Muscatine Island is in a similar situation.

It is included in the Senate version but not in the House. I believe it is in one of the bills, but not the other. The Corps of Engineers has expressed a capability of $150,000 to initiate and complete engineering and planning in this project.

In other words, we are $150,000 away from a final report after many, many years of study and expenditures. We realize under the restraints that have been imposed that if these monies are made or funded it must come probably from some other project, but we would urge you to take a look at it in the light of its merits to see if something can be done.

We are still concerned over some other problems on the Mississippi River. We are concerned about not getting too ambitious on user fees because of the agricultural interest. We are concerned about the maintenance on the Upper Mississippi River as far as bank erosion control, but we have no specific requests. We just urge you in this case to look over these three projects and to help us if you can.

Thank you.

Mr. BEVILL. Thank you for a very good presentation. We will certainly do what we can on that, Mr. Klingner.

[The statement of Mr. Klingner follows:]

UPPER MISSISSIPPI FLOOD CONTROL ASSOCIATION

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Quincy, Illinois 62301

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R.R.
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Wm. J. Pieper
Vice President (Iowa)
R.F.D.
Wever, Iowa 52658

D.C. McConnell
Vice President (Missouri)
Taylor, Missouri 63471

April 14, 1986

Statement from:

UPPER MISSISSIPPI FLOOD CONTROL ASSOCIATION

By:

William H. Klingner, President
Quincy, Illinois 62301

To: The United States Senate Committee on Appropriations, Subcommittee on Energy and Water Development, April 14, 1986.

The United States House of Representatives, Committee on Appropriations, Subcommittee on Energy and Water Development, April 14, 1986.

SUMMARY AUTHORIZED STUDIES

	SURVEYS AND STUDIES	BUDGETED FY 87	REQUESTS	REMARKS
1.	South Quincy Drainage & Levee District, IL (F.C.)	$1,000,000 (c)	$1,000,000	See Discussion
2.	Green Bay Levee & Drainage District No. 2, Iowa	0	$ 150,000	To Initiate C.P.& E. See Discussion
3.	Muscatine Island Levee & Drainage District and Muscatine Louisa Co. Drainage District No. 13, Iowa	0	$ 150,000	To Initiate & Complete C.P. & E. See Discussion

The Upper Mississippi Flood Control Association is honored to again be granted the priviledge of presenting oral and written testimony before your Honorable Committee relative to FY 1987 Water Resources Projects within the confines of our membership. This is the thirty-third (33) consecutive year we have been so honored.

For the record, and as stated many times, our Association extends from Guttenberg, Iowa to Hamburg Bay, Illinois, some 350 miles along both sides of the Mississippi River and embraces that portion of the River flood plain in the tri-state area of Missouri, Illinois and Iowa.

With your permission, Mr. Chairman, I would like to proceed by requesting that our complete statement be placed in the record of these hearings. In the interest of time, I would like to orally summarize portions of our statement.

In presenting this testimony, our Association is keenly aware of the restraints placed upon the Army's Civil Works Program and the objectives of avoiding larger Federal budgetary deficits and the problem of living within the "Balanced Budget and Deficit Control Act, Public Law 99-177".

We are confining our testimony to authorized studies within our area and a brief status report on each project.

DISCUSSION OF FY 87 BUDGET REQUESTS

IN ORDER OF SEQUENCE

1. The "Final Feasibility Study for Flood Damage Reduction, South Quincy Drainage and Levee District, Illinois", has been completed and approved by all Federal and State Governmental Agencies and is included in the President's Budget for FY 87 in the amount of $1,000,000 to initiate construction.

   We respectfully urge your Honorable Committee to support retention of these funds.

   The South Quincy Drainage & Levee Drainage District has agreed to the cost sharing provisions and is willing and stands ready to carry out the provisions of its executed "Memorandum of Understanding" with the State of Illinois, dated October 24, 1984 and its companion "Letter of Intent" filed with the Corps of Engineers, October 21, 1984.

The project cost is estimated as follows:

Federal Costs at 75% = $9,670,000
Non-Federal Costs at 25% = $3,230,000
Total Project Costs =$12,900,000

The State of Illinois continues to assure the South Quincy Drainage and Levee District that it is prepared to meet its part of the Sponsor's share as set forth in the executed "Memorandum of Understanding".

It is hoped that this project may continue on schedule and that funds will be made available in FY 87.

2. The Green Bay Levee and Drainage District No. 2, Iowa, Flood Control Project is dormant due to lack of Federal funding.

As stated last year, after running the gauntlet of approximately nine years of study, dredging demonstration projects, inter-State and Federal Agreements, a C.O.E. design study or Survey Report based upon a 200 year flood frequency protection was completed. The Board of Engineers of Rivers and Harbors during review recommended that the protection be increased to a 500 year flood frequency design.

The administration found that a 500 year design was not appropriate for Agriculture areas and questioned the proposed protection to the large Fertilizer Plant within the District. The Office of Management and Budget rendered an opinion that the Fertilizer Plant constitutes an industrial point source, which must comply with Federal Water Pollution Control laws, laws which require actual or probable industrial polluters to control pollutants at their own expense.

The Fertilizer Plant is strictly for the purpose of manufacturing agricultural fertilizer, nitrogen and phosphate and has its own protective dikes with zero discharge. The plant has evaporation pools of approximately 300 acres which evaporate all of the plant effluent. It could well be feasible for the plant to transport its fertilizer components and gypsum waste out of the flood plain.

It is our understanding that in the Corps of Engineers Cost-Benefit analysis, benefits were not taken for probable damages of chemical spills into the River due to a levee failure.

The Drainage District, has no serious objection to reverting back to the original design and cost basis of a 200 year frequency flood protection project, but agrees with the analysis of the Board of Engineers for Rivers and Harbors that a 500 year design is cost effective.

Our Association now understands the Green Bay Project is included in Senate Bill S1567 as recently passed and is included in House Bill HR6 as passed last fall. Both Bills have been referred to the joint Conference Committee for study.

In light of the tremendous time, cost, and study that has gone into this project, may we suggest that the Congress take a second look and re-open the study at this time.

Our Association respectfully requests that $150,000 be made available in FY 87 to initiate Continuing Planning and Engineering.

3. The Muscatine Island Levee and Drainage District and Muscatine Louisa County Drainage and Levee District No. 13, Iowa, is included in House Bill (HR6) as passed last fall, but is not included in Senate Bill (S1567).

   Here again, many years of planning and negotiation have gone into this project in an attempt to bring the project to the stage of authorization and appropriation. The Corps of Engineers has expressed a capability of $150,000 for FY 87 to initiate and complete Continuing Planning and Engineering. The sponsor has expressed a willingness to participate in construction costs up to 35%.

   We respectfully request that your Honorable Committee give serious consideration for funding the continuing study to the full capability of the Corps of Engineers to carry out the work. It would seem cost effective to complete the planning.

For the first time in many years the President's Budget includes a commitment for new starts on some Water Resources projects. We receive this as good news in the hopes that it indicates that the Administration believes that legislation can be enacted and carried out within the budget restraints imposed. We are hopeful that our requests may be funded within these restraints.

Please note that our requests for non-budgeted funds are on two of the three projects found in need of modification, in response to a resolution adopted December 11, 1969 by the U. S. House of Representatives, Committee on Public Works. The

Committee requested the Board of Engineers for Rivers and Harbors to review the reports on the "Mississippi Coon Rapids Dam to the Ohio River Projects" and make recommendations.

May we again call to your attention our Association's views and concerns over some of the pending and current legislation or policies involving Water Resources Projects.

As reported, the past two years, if cost sharing is inevitable, and we can understand the pressures and desires of the Administration and Congress, a flexible, non-rigid approach is suggested. A case by case determination would seem reasonable.

Our Association continues to have serious reservations over the justification of a change in flood control policy over the Upper Mississippi River involving the Navigation system at this time, for the simple reason that the Navigation system including the Locks and Dams, levees, and appurtenances are all a part of an integral system closely tied to human lives, recreation, the environment, and the economic vitality of the entire region. The projects under study are merely upgrading the system.

We believe flood control on major rivers is a Federal responsibility and should be evaluated, designed and constructed on a regional basis having an overall objective, not on a project by project basis.

May we be forgiven for again repeating our concern that Congress may become over zealous in establishing "USER FEES" on Navigation projects and "Cost-Sharing" on Water Resources Projects. USER FEES on the Upper Mississippi River System will bear most heavily on Agriculture since by far the vast majority of River transport is agriculturally related.

Lower cost water transportation is beneficial to all.

Thanks for the courtesy extended in allowing our Association to present this testimony.

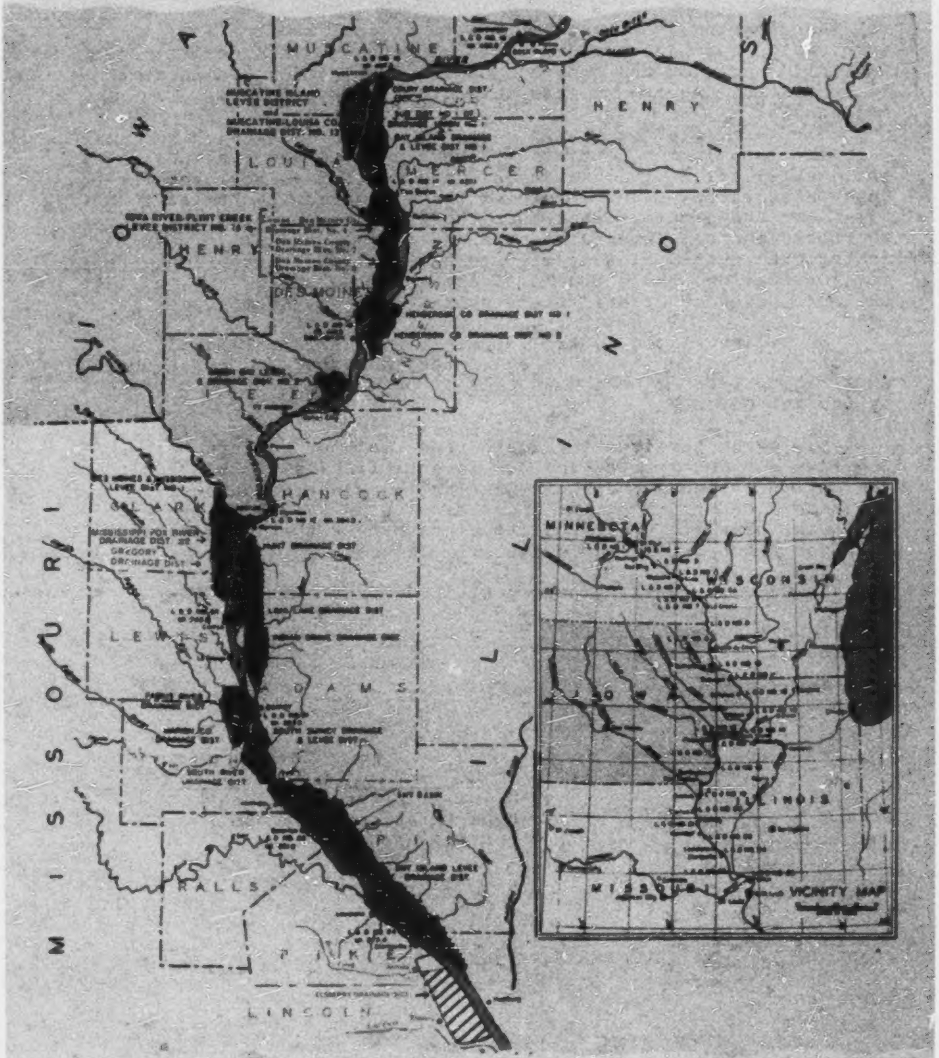
Respectfully Submitted,

W. H. Klingner

W. H. Klingner, President
Upper Mississippi Flood
Control Association

UPPER MISSISSIPPI FLOOD CONTROL ASSOCIATION

REPRESENTING LEVEE AND DRAINAGE DISTRICTS BORDERING
ON UPPER MISSISSIPPI RIVER IN ILLINOIS, IOWA, AND MISSOURI


IOWA
MUSCATINE
MUSCATINE ISLAND LEVEE DISTRICT and MUSCATINE-LOUISA CO. DRAINAGE DIST. NO. 13
LOUISA
HENRY
MERCER
IOWA RIVER-FLINT CREEK LEVEE DISTRICT NO. 16
HENRY
DES MOINES
HENDERSON CO. DRAINAGE DIST. NO. 1
HENDERSON CO. DRAINAGE DIST. NO. 2
LEE
HANCOCK
CLARK
MISSISSIPPI FOX RIVER DRAINAGE DIST. NO. 2
GREGORY DRAINAGE DIST.
HUNT DRAINAGE DIST.
LIMA LAKE DRAINAGE DIST.
LEWIS
ADAMS
SOUTH QUINCY DRAINAGE & LEVEE DIST.
SOUTH RIVER DRAINAGE DIST.
SNY ISLAND LEVEE DRAINAGE DIST.
PIKE
RALLS
PIKE
ELSBERRY DRAINAGE DIST.
LINCOLN
ILLINOIS
MISSOURI
MINNESOTA
WISCONSIN
IOWA
ILLINOIS
MISSOURI
VICINITY MAP

Survey report positive.

Levee improvement placed on deferred status.

Mississippi River, Coon Rapids Dam to Ohio River. "Project Review" surveys negative.

Projects shown were authorized in Flood Control Act 1954, House Document 281/83/2, House Document 247/83/2; or Flood Control Act 1946 House Document 713/79/2. Gregory Drainage District authorized by 1962 Flood Control Act, approved October 23, 1962, House Document 564/87/2. Elsberry Drainage District Authorized 1944, House Document 669, 76th Congress, 3rd Session withdrew from Association 1982.

- Over 380 miles of levee protecting over 380,000 Acres of homes, farms, industries, businesses & transportation facilities.
- Estimated annual damages over $5,285,000.
- Along a 200 mile reach of the Mississippi River—home and work for 511,717 people.

1.

2.

3.

UPPER MISSISSIPPI FLOOD CONTROL ASSOCIATION

REPRESENTING LEVEE AND DRAINAGE DISTRICTS BORDERING ON UPPER MISSISSIPPI RIVER IN ILLINOIS, IOWA AND MISSOURI

William H. Klingner, President, 617 Broadway, Quincy, Illinois

John [illegible], Vice President, Illinois
Nebo, Illinois [illegible]

Wm. J. Pieper, Vice President, Iowa
R.F.D., Wever, Iowa [illegible]

O. C. McConnell, Vice President, Missouri
Taylor, Missouri 63471

Greg [illegible], Secretary
New Canton, Illinois [illegible]

Matthew A. [illegible], Treasurer
423 N. 8th St., Quincy, Illinois 62301

Early in the Nineteen Fifties, individual Member Districts of our present Association began appearing before your Honorable Committee to urge the completion of the Upper Mississippi River Development proposed in the 1930's.

Each year, since our first appearance on May 15, 1953, you have granted us the honor and privilege of appearing before your Committee to present our views.

In 1954, sixteen of our present twenty-five member Districts which were included in the Flood Control Act of 1954, House Document No. 281, 83rd Congress, banded themselves together as the Upper Mississippi Flood Control Association.

Since that time our Association has been the official spokesman for all our member Districts in Missouri, Illinois and Iowa on both sides of the River extending from Guttenberg, Iowa to Hamburg Bay, Illinois.

The 1962 Flood Control Act authorized the Gregory Drainage District project: House Document No. 546, 87th Congress, Second Session. The Missouri District was admitted as a member of our Association on February 1967 and lies directly across the Mississippi River from the Hunt-Lima Lake Drainage Districts of Illinois.

Directly across the River from Hamburg Bay, Illinois and opposite the lower end of the Sny Island Levee Drainage District, lies the Elsberry Drainage District, Lincoln and Pike Counties, Missouri. This District contains approximately 20,000 acres of rich agricultural lands protected by 24.4 miles of levees. These levees also protect the City of Elsberry and the surrounding area.

The Elsberry Drainage District Flood Protection Project was authorized in 1914 under House Document No. 669, 70th Congress, 3rd Session. Early in 1970 the Elsberry Drainage District became a member of our Association. The project has been placed on inactive status. The District withdrew from the Association in 1982.

The Mississippi Fox Drainage District #2 was admitted to membership in 1976. The Project Survey was authorized prior to 1965 under the authorized "Fox River, Iowa and Missouri Study".

The Sny Island Levee Drainage District Seepage Study was authorized under the Rivers and Harbors Act of 1937 and reauthorized under R. & H. Act of March 2, 1945. The Public Appropriations Act of 1973 (P.L. 92-405) provided funds for restudy.

The adjoining pictures were taken in the Fabius River Drainage District during the peak of the 1973 flood.

1. Industrial Area West Quincy, showing flooded Mississippi River.
2. Fabius River Drainage District flooded—City of Quincy, Illinois in background.
3. Quincy Memorial Bridge looking West into Missouri. U. S. Highway 24 closed on account of flood.
4. Motel completely under water from Mississippi River.

CLOVER LEAF
MOTEL
4.

MEMBER DISTRICTS

1. Drury Drainage District—Illinois
2. Muscatine-Louisa County Drainage District No. 13—Iowa
3. Muscatine Island Levee District—Iowa
4. Muscatine City-Muscatine Island Flood Control Commission—Iowa
5. Sub-District No. 1 of Drainage Union No. 1—Illinois
6. Bay Island Drainage & Levee District No. 1—Illinois
7. Louisa-Des Moines County Drainage District No. 4—Iowa
8. Des Moines County Drainage District No. 7—Iowa
9. Des Moines County Drainage District No. 8—Iowa
10. Iowa River-Flint Creek Levee District No. 16—Iowa
11. Henderson County Drainage District No. 1—Illinois
12. Henderson County Drainage District No. 2—Illinois
13. Green Bay Levee & Drainage District No. 2—Iowa
14. Des Moines & Mississippi Levee District No. 1—Missouri
15. Hunt Drainage District—Illinois
16. Lima Lake Drainage District—Illinois
17. Indian Grave Drainage District—Illinois
18. Fabius River Drainage District—Missouri
19. Marion County Drainage District—Missouri
20. South Quincy Drainage & Levee District—Illinois
21. South River Drainage District—Missouri
22. Sny Island Levee Drainage District—Illinois
23. Gregory Drainage District—Missouri
24. Elsberry Drainage District—Missouri (withdrew 1982)
25. Mississippi-Fox Drainage District No. 2—Missouri

MONDAY, APRIL 14, 1986.

CORPS OF ENGINEERS AND ARC PROGRAMS

WITNESS

HON. ALAN B. MOLLOHAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST VIRGINIA

Mr. BEVILL. Next we have our good friend and colleague, Congressman Alan Mollohan. We are pleased to have you with us.

You may submit your prepared statement and proceed as you wish.

Mr. MOLLOHAN. Mr. Chairman, Mr. Myers, again, I appreciate very much the opportunity to appear before the subcommittee. You have been very receptive and we very much appreciate that in the First District of West Virginia.

We are in strong reliance upon your understanding of our needs on some very important waterway projects and you have been extremely responsive and I repeat, we are extremely grateful.

I am pleased to report that the Stonewall Jackson Lake and Dam which you all worked so very hard on is progressing well and is to be completed on schedule. You might be interested to know, if others haven't testified and advised you before my appearance, that it achieved a significant benefit during November 1985 flooding in West Virginia.

The stonewall Jackson project reduced flooding in Weston by four feet. That number sticks in my mind and, although that may not be the accurate number, the important point is even in its uncompleted state, it provided real protection to our communities in north central West Virginia.

So we are particularly pleased. If we had it completed, it would have made a more dramatic impact. That was well recognized in the press and the public and very much appreciated.

We are supporting all the funding levels for the Stonewall Jackson Lake and Dam, for the replacement of the Gallipolis lock and dam along the Ohio River, for the replacement of lock and dam number 8 on the Monongahela River, the Tygart Lake operations and maintenance, and construction of an additional locking facility at Winfield lock and dam.

All of these are deserving and much needed. In addition to the Administration's budget request, we would request an additional $4.2 million for lock number 7 on the Monongahela River.

It is my understanding that in addition to the requested appropriation, the Corps of Engineers has a capability for land acquisition in the amount of $4.2 million that it could move forward on if approval were given this spring. I refer you, Mr. Chairman, to a letter written to you and signed by our whole West Virginia delegation setting forth that request and the reasons for it.

We would ask that the committee consider that increased appropriation that is in line with the Corps of Engineers' own statement of its capability to initiate real estate acquisition at this time instead of one fiscal year into the future.

[The statement of Mr. Mollohan follows:]

TESTIMONY OF

HON. ALAN B. MOLLOHAN

OF WEST VIRGINIA

BEFORE THE HOUSE APPROPRIATIONS

COMMITTEE ON ENERGY AND WATER DEVELOPMENT

Monday, April 14, 1986

SUMMARY

Mr. Mollohan respectfully requests the House Appropriations Subcommittee on Energy and Water Development to approve the Administration's Fiscal Year 1987 request for $26 million for continued development of the Stonewall Jackson Lake and Dam in West Virginia. In addition, Mr. Mollohan expresses his support for the replacement of the Gallipolis Locks and Dam along the Ohio River ($3.5 million); replacement of Lock 7 ($4.2 million) and Lock 8 ($730,000) on the Monongahela River; Tygart Lake operations and maintenance ($855,000); and construction of an additional locking facility at the Winfield Lock and Dam ($1.75 million) on the Kanawha River. He also encourages the Subcommittee to continue funding for the Appalachian Regional Commission.

MR. CHAIRMAN, MR. MYERS AND MEMBERS OF THE SUBCOMMITTEE, I AM PLEASED TO ONCE AGAIN APPEAR BEFORE THIS DISTINGUISHED BODY TO EXPRESS MY SUPPORT FOR PROGRAMS AND PROJECTS OF IMPORTANCE TO THE FIRST CONGRESSIONAL DISTRICT OF WEST VIRGINIA WHICH I REPRESENT.

I AM IN ALMOST FULL AGREEMENT WITH THE ADMINISTRATION'S FISCAL YEAR 1987 BUDGET REQUEST FOR U.S. ARMY CORPS OF ENGINEERS' INITIATIVES IMPACTING MY DISTRICT.

THE PROPOSED FUNDING LEVELS FOR CONTINUED DEVELOPMENT OF THE STONEWALL JACKSON LAKE AND DAM ($26 MILLION); REPLACEMENT OF THE GALLIPOLIS LOCK AND DAM ALONG THE OHIO RIVER ($3.5 MILLION); REPLACEMENT OF LOCK AND DAM #8 ON THE MONONGAHELA RIVER ($730,000); TYGART LAKE OPERATIONS AND MAINTENANCE ($855,000); AND CONSTRUCTION OF AN ADDITIONAL LOCKING FACILITY AT THE WINFIELD LOCK AND DAM ($1.75 MILLION) ARE ALL MUCH-NEEDED AND DESERVING. I STRONGLY ENCOURAGE THE COMMITTEE TO ACT FAVORABLY ON THESE LEVELS OF FUNDING FOR FISCAL YEAR 1987.

IT SHOULD BE NOTED, HOWEVER, THAT THE CORPS HAS PROPOSED AND THE ADMINISTRATION HAS REQUESTED TO SPEND $670,000 ON THE LOCK AND DAM #7 REPLACEMENT PROJECT ON THE MONONGAHELA RIVER. THIS WOULD APPEAR TO BE A SUITABLE APPROPRIATION, BUT NEW INFORMATION PROVIDED BY THE OHIO RIVER DIVISION OF THE CORPS POINTS OUT THAT IT IS CAPABLE OF BEGINNING LAND ACQUISITION AND SPENDING $4.2 MILLION IN FISCAL YEAR 1987. IF THE COMMITTEE WOULD INCREASE THE FISCAL YEAR 1987 APPROPRIATION TO $4.2 MILLION FOR LOCK #7, IT WOULD ACCELERATE BY A FULL YEAR THE TIME IT WILL TAKE THE CORPS TO REPLACE THIS DETERIORATING LOCKING FACILITY. I WHOLEHEARTEDLY SUPPORT AN INCREASED LEVEL OF FUNDING FOR LOCK AND DAM #7.

I WOULD LIKE TO SUBMIT FOR THE RECORD A COPY OF THE LETTER, DATED MARCH 25, 1986, THAT THE WEST VIRGINIA HOUSE DELEGATION WROTE TO YOU AND YOUR COMMITTEE OUTLINING THE FULL JUSTIFICATION FOR A $4.2 MILLION APPROPRIATION DURING FISCAL YEAR 1987 FOR THE LOCK AND DAM #7 REPLACEMENT PROJECT.

IN ADDITION, I WOULD LIKE TO ENCOURAGE THE COMMITTEE TO IGNORE THE ADMINISTRATION'S ILL-ADVISED PROPOSAL TO ELIMINATE FUNDING FOR THE APPALACHIAN REGIONAL COMMISSION. SINCE ITS CREATION IN 1965, ARC HAS PROVIDED THE 13 APPALACHIAN STATES WITH FUNDS TO MAKE MUCH-NEEDED HIGHWAY, ECONOMIC DEVELOPMENT, HEALTH AND EDUCATION IMPROVEMENTS TO BRING THIS REGION IN LINE WITH OTHER PARTS OF THE COUNTRY. MUCH PROGRESS HAS BEEN MADE THROUGHOUT APPALACHIA, BUT MY HOME STATE OF WEST VIRGINIA CAN CONTINUE TO UTILIZE ARC MONIES TO COMPLETE ITS HIGHWAY SYSTEM AND IMPROVE ITS ECONOMY.

SEVERAL CRITICAL HIGHWAY PRIORITIES IN MY DISTRICT WHICH ARE DEPENDENT UPON MATCHING FEDERAL HIGHWAY FUNDS INCLUDE THE REPLACEMENT OF THE NOW-CLOSED, DETERIORATING WILLIAMSTOWN-MARIETTA BRIDGE SPANNING THE OHIO RIVER, CONSTRUCTION OF THE U.S. ROUTE 22 BYPASS AT WEIRTON WHICH WILL LINK-UP WITH THE NEW WEIRTON-STEUBENVILLE BRIDGE, AND COMPLETION OF U.S. ROUTE 50 THROUGH PARKERSBURG.

MR. CHAIRMAN, I SINCERELY APPRECIATE YOUR COOPERATION OVER THE YEARS ON THESE AND OTHER PRIORITY ISSUES. THANK YOU FOR ALLOWING ME TO PRESENT MY INPUT FOR YOUR CONSIDERATION.

INTERIOR AND
INSULAR AFFAIRS COMMITTEE
SUBCOMMITTEES
ENERGY AND ENVIRONMENT
MINING AND NATURAL RESOURCES
NATIONAL PARKS AND RECREATION

VETERANS AFFAIRS COMMITTEE
SUBCOMMITTEES
HOSPITALS AND HEALTH CARE
HOUSING AND MEMORIAL AFFAIRS

STANDARDS OF OFFICIAL CONDUCT
COMMITTEE

CONGRESSIONAL STEEL CAUCUS
EXECUTIVE COMMITTEE

CONGRESSIONAL COAL GROUP

ALAN B. MOLLOHAN
1st District, West Virginia

Congress of the United States
House of Representatives
Washington, D.C. 20515

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CANNON HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-4172

DISTRICT OFFICES:
ROOM 209, POST OFFICE BUILDING
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623-4422

ROOM 102, CITY-COUNTY COMPLEX
FAIRMONT, WEST VIRGINIA 26554
363-3356

ROOM 1117, FEDERAL BUILDING
PARKERSBURG, WEST VIRGINIA 26101
428-0493

ROOM 316, FEDERAL BUILDING
WHEELING, WEST VIRGINIA 26003
232-5390

March 25, 1986

Hon. Thomas Bevill
Chairman
House Appropriations Subcommittee
on Energy and Water Development
2362 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairman:

We are most appreciative of the tremendous support you and members of the House Appropriations Subcommittee on Energy and Water Development have given to the modernization of the lock and dam infrastructure on the Ohio River navigation system, particularly at Locks and Dams #7 and #8 on the Monongahela River. As you know, last year's Energy and Water Development Appropriations Bill provided a limited authorization and continued funding for advanced work in conjunction with advanced engineering and design as well as real estate acquisition at Locks and Dams #7 and #8.

We note with interest that the President's Fiscal Year 1987 budget requests $670,000 to complete the Lock and Dam Design and Relocation Feature Design Memorandums for the proposed Gray's Landing Lock and Dam #7 replacement project. While we wholeheartedly support funds for that purpose, it should be noted that in January 1986, the Pittsburgh District's General Design Memorandum and Real Estate Feature Design Memorandum were approved for the proposed Gray's Landing site. These reports were prepared under the Continuing Planning and Engineering phase of project development.

Subsequent to HQUSACE approval of the CP&E report, the Pittsburgh District requested authorization and funding to initiate land acquisition for the Gray's Landing site. That request was endorsed by the Ohio River Division and forwarded to HQUSACE on February 28, 1986, for further endorsement by the Assistant Secretary of the Army for Civil Works.

Assuming the Assistant Secretary's approval, and based on our Gallipolis Lock and Dam replacement project experience (approval took one month), we could be in a position to initiate land acquisition activities this spring. Our current schedule indicates that acquisitions of tracts would begin in October 1987 and would be completed by March 1989; assuming, of course, a spring 1986 approval to begin pre-acquisition work.

Following that sequence, the first construction contracts for lock and dam features could be awarded about April 1989 if construction authorization has occurred.

Because of the recent approvals by the Assistant Secretary of the Army for Civil Works, the capability of the U.S. Army Corps of Engineers is much larger than the amount of monies currently budgeted for Fiscal Year 1987. In fact, the Corps can begin to initiate real estate acquisition for Gray's Landing if funding for the full level of their capability is realized. According to the Ohio River Division Engineer, the Corps' capability for Gray's Landing is $4.2 million. This is confirmed by the enclosed correspondence from the Ohio River Division Engineer to Mr. R. Barry Palmer, Executive Director of DINAMO/OVIA, the Association for the Development of Interstate Navigability in America's Ohio Valley.

The West Virginia Congressional delegation respectfully urges you and your distinguished Subcommittee members to increase the amount of monies dedicated to this critical water resources/water transportation project in line with the full capability of the U.S. Army Corps of Engineers.

Thank you very much for your time and attention to this most important appropriations matter.

Most sincerely,

Nick Rahall
Nick J. Rahall, M.C.

Alan Mollohan
Alan B. Mollohan, M.C.

Bob Wise
Robert E. Wise, Jr., M.C.

Harley O. Staggers Jr.
Harley O. Staggers, Jr., M.C.

ABM:mf
Enclosures

DEPARTMENT OF THE ARMY
OHIO RIVER DIVISION, CORPS OF ENGINEERS
P. O BOX 1159
CINCINNATI, OHIO 45201

13 MAR 1986

Mr. R. Barry Palmer
Executive Director
DINAMO/OVIA
Three Gateway Center
Pittsburgh, Pennsylvania 15222

Dear ~~Mr. Palmer~~: Barry

I refer to your 11 March 1986 telephone request for information on the Fiscal Year 1987 President's budget and approved capabilities for the ORD navigation program. You further requested information on progress to date and future activities scheduled for the Grays Landing project.

I believe the attached table and status report on Grays Landing responds to your request.

Your knowledge of the Ohio River System and support for safe, efficient and cost effective navigation modernization has provided valuable input to our overall navigation program. Please advise if we can be of further assistance.

Sincerely,

Pete

2 Encls

Peter J. Offringa
Brigadier General, U.S. Army
Division Engineer

appreciat your continued interest.

Status Report - Grays Landing (Mon L&D 7 Replacement)

In January 1986 the Pittsburgh District's General Design Memorandum and Real Estate Feature Design Memorandum were approved for the proposed Grays Landing site. These reports were prepared under the Continuing Planning and Engineering (CP&E) phase of project development.

Subsequent to HQUSACE approval of the CP&E reports, the Pittsburgh District requested authorization and funding to initiate land acquisition for the Grays Landing site. That request was endorsed by the Ohio River Division and forwarded to HQUSACE on 28 Feb 86 for further endorsement to the Assistant Secretary of the Army for Civil Works (ASA/CW) for approval.

Assuming ASA/CW approval, and based on our Gallipolis experience (approval took one month), we could be in position to initiate land acquisition activities this spring. Our current schedule indicates that acquisition of tracts would begin in October 1987 and would be completed in March 1989; assuming, of course, a Spring 1986 approval to begin pre-acquisition work. Following that sequence the first construction contracts for lock and dam features could be awarded about April 1989 if construction authorization has occurred.

ORDPD-N
13 Mar 1986

CORPS OF ENGINEERS
NAVIGATION FUNDING CAPABILITIES FOR FISCAL YEAR 1987
IN THE OHIO RIVER BASIN

DATE: 13 JANUARY 1986

NAME OF SURVEY OR PROJECT	CATAGORY	CAPABILITY[1/]	PURPOSE OF ADDITIONAL CAPABILITY
Wabash River	Planning	$350,000	Advance Completion of Interim Feasibility Study 2 Months
Olmsted L&D	CP&E	$2,500,000	Advance Study Completion 4 Months
Grays Landing L&D	Construction	$4,200,000	Initiate Real Estate Acquisition

1/ Although project and study capabilities reflect the readiness of the work for accomplishment, they are in competition for available funds and manpower Army-wide. In this context, the Fiscal Year 1987 capability amounts shown consider each project or study by itself without reference to the rest of the program. However, it is emphasized that the total amount proposed for the Army's Civil Works Program in the President's Budget for Fiscal Year 1987 is the appropriate amount consistent with the Administration's assessment of national priorities for Federal investments and Government borrowing is having on the national economy. Therfore, while we could utilize additional funds on individual projects and studies, offsetting reductions would be required in order to maintain our overall bugetary objectives.

FY87 Funding for ORD Navigation Studies

Project/Study	President's FY87 Budget Thousand $	FY87 Funds Utilization
FEASIBILITY STUDIES		
Lower Mon (L&D's 2,3 & 4)	700	Complete Condition Studies, Initiate Draft Report
Ohio River Mainstem	(2,560)	
Upper Ohio (E,D & M L&D's)	810	Continue Condition Studies, Economic and Environmental Evaluations
Lower Ohio (McAlpine L&D)	900	Continue Economic Studies & Environmental Studies
Kanawha River (Marmet L&D)	650	Begin Condition, Economic & Environmental Investigations
Big Sandy River	165	Complete Final Report
Lower Kentucky River	430	Complete Final Report
Wabash River	200	Complete Recon Study, Initiate Feasibility Study if Warranted
Cumberland/Tennessee	(1,450)	
Upper Cumb./Tenn	760	Continue Navigation system evaluations
Lower Cumberland	140	Complete Final Report
CONTINUED PLANNING AND ENGINEERING		
Olmsted L&D	1,500	Continue site mapping, foundation investigations & hydraulic modeling
CONSTRUCTION (DESIGN & REAL ESTATE ACQUISITION)		
Winfield L&D	1,750	Prepare General Design Memorandom
Grays Landing L&D	670	Complete L&D Design & Relocation Feature Design Memos
Point Marion L&D	730	Complete the General Design Memo and Initiate Feature Designs
Gallipolis L&D	3,500	Continue Real Estate Acquisition and Engineering Design
TOTAL	12,905	

Mr. **Bevill**. We certainly will work with you, as you know, and do the best we can to accommodate you.

Mr. **Mollohan**. Thank you very much, Mr. Chairman.

Mr. **Bevill**. The flood control projects certainly have always proven to be good investments. I am glad to hear that report that you gave us.

Mr. **Mollohan**. Thank you, sir.

Mr. **Bevill**. At this point, we will have the statement by Henry G. Williams, Commissioner, New York State Department of Environmental Conservation appear in the record.

[The statement follows:]

New York State Testimony
Before the Subcommittee on Energy and Water Development
# of the
House Committee on Appropriations
for Fiscal Year 1987
Appropriations for the Federal Civil Works Program

Mr. Chairman, and members of the Subcommittee, my name is Henry G. Williams. I am Commissioner of the New York State Department of Environmental Conservation.

The United States Army Corps of Engineers through the Civil Works Program has contributed to the growth of the Nation's economy. Federal investments in flood control and shore protection and erosion control facilities, navigation improvements and port and harbor projects have had a positive effect on commercial activity. They have protected the general welfare, health and safety of the country's citizenry.

Today the nation is evolving into a new era of construction need. It is one of maintaining and improving the economic foundation in which we have so diligently invested. Our infrastructure systems must maintain their level of effectiveness to insure efficient and reliable delivery of goods and services.

Revitalization of the country's economic foundations is nowhere more important than in the area of water supply. Water is integral to every aspect of economic activity. It is essential to guaranteeing safety for community populations. Our environment and our health require a sufficient quantity of good quality water. This complex water supply arena demands the attention of the Corps. In this regard, the public has come to expect a certain standard of performance from our system's infrastructure. Disruptions are not tolerated; maintenance needs are more complex. Better capital planning and management is required. These work items as well as the more traditional design and construction expertise of the Corps of Engineers are urgently needed to insure adequate water supply. We envision a federal, state and local partnership to advance these needed improvements.

In this regard, New York State is moving to identify the precise nature and dimension of the water system infrastructure problem. Water resources strategies by 13 substate regions are being prepared. Preliminary findings show that the extent of the problem is enormous, totaling $10.9 billion. The estimate does not include the water supply source needs for the metropolitan New York area. It is premature to make cost estimates for this area now because of the likely impact of the measures required to combat the effects of a drought, an event of which you are surely well aware. Its impacts have been staggering. The lack of water has put in jeopardy the commercial and financial hub of the Nation. We cannot let it fall captive to an inefficient and ineffective water operating system. The drought that adversely affected southeastern New York last year, as well as the 1980-81 drought has occasioned the re-evaluation of water supply needs in the area. This effort is being led by New York City.

In fact, New York City has established a task force of federal, state, and local officials to identify water supply alternatives and demand management options. We, as well as the Corps of Engineers, have participated on the Task Force. The Corps of Engineers has existing authority to participate in this effort but needs additional funding to allow a better definition and resolution of the metropolitan New York Water Supply problems.

Today, I want to highlight two PL 89-298 programs which have been very important in helping us in our efforts to provide adequate water supply and delivery systems for our citizens. Their sufficient funding would help our efforts to combat the effects of the drought.

First, the Section 214 program has enabled us to develop fundamental information about the condition of our water supply infrastructure in large and small communities throughout the state. We are requesting $1.5 million for FFY-1987 under the Section 214 program. It would be used to help us determine the solution to our current water system infrastructure dilemma. Second, the Northeast Water Supply Study, called (NEWS), has explored water supply needs of the New York metropolitan area, the lower Hudson Basin, and adjacent watersheds. We need $1 million in federal funds in FFY 87 to advance the recommendations of the NEWS study and the Corps of Engineers action plan related to it.

We must note, however, that the NEWS study which was completed in 1977, proposed further evaluations that would focus on issues relating to new source developments. These issues include reassessment of the water supply deficit in view of recent drought experiences and changed population and growth projections, re-evaluation of a number of alternative solutions to environmental problems, and preliminary work related to the third city water tunnel. This is more urgently needed now because of the area's water shortage.

Nine years have passed and the additional evaluations called for in the NEWS Study have yet to be initiated. Funding for these additional studies, and for review by the Corps of Engineers for construction drawings of City

Tunnel #3, pending further federal involvement, is needed now. Costs for this initial study are estimated at $15 million, of which we are requesting $1,000,000 for FFY 1985.

In addition, we have a list of 18 specific projects or studies which are very important to New York State. Six of these are included in the President's proposed budget at levels which are insufficient to do the job properly; even worse, no funds at all have been budgeted for the other 12 projects. I respectfully and strongly request an additional $46 million to adequately address the modest program of civil works which these 18 projects represent. (The projects are shown on the attached table.)

Flood Control

Damaging floods occur in some portion of New York virtually every year. It is estimated that 1.5 million people live in the nearly 1500 flood-prone communities in the State. Average annual flood damages are conservatively estimated at $100 million. New York State vigorously promotes participation in the National Flood Insurance Program. Even so, only a small fraction of flood losses are covered by insurance. The Corps of Engineers' Flood Protection programs play a vital role in helping to combat New York's flood problems. The proposed civil works funding levels fall far short of the needs in New York.

New York State supports funding of all projects as they appear in the budget except for the St. Lawrence Seaway Additional Locks Study as discussed elsewhere and where funding levels are inadequate. Requests for increased levels of funding are discussed in the following paragraphs and in the attached table.

Ellicott Creek

Major flooding along Ellicott Creek in February of 1985 resulted in damages in excess of $3 million in the Town of Amherst. These damages would have been prevented if the Ellicott Creek Flood Protection Project was completed and functioning. The state has committed, to date, in excess of $2 million for lands and relocations and has completed construction of a major segment of the project in conjunction with highway construction. The state strongly supports funding in the amount of $3 million for construction of the first segment of this project. Completion of the first segment is urgently needed to allow the already constructed North Division Channel to function.

The Ellicott Creek project is New York's highest flood control priority for initiation of construction.

Fire Island Inlet to Montauk Point Reformulation Study

During 1978 the President's Council on Environmental Quality required the Corps of Engineers to reformulate this hurricane protection project. After eight years and the expenditure of $4.7 million, this study is incomplete; and no funds have been included for study continuation in the FY 87 budget. Without completion of the study, there can be no basis for future planning and project development by Federal or non-Federal interests. Without bringing the study to a reasonable level of completion, the majority of the $4.7 million already expended will be largely wasted. New York strongly requests an appropriation of $1.5 million to bring the study to a reasonable level of completion and that Congress direct the Chief of Engineers to complete the study.

Dansville

Again this year, no funds are included in the budget for construction of the Dansville Flood Protection Project because neither the Village of Dansville nor the State of New York would yield to coercive pressures by the administration to contribute to the construction costs above the level mandated by Congress. An appropriation of $500,000 is urged to initiate construction of this project.

Westchester County Streams - Mamaroneck and Sheldrake Rivers

An appropriation of $750,000 rather than the budget amount of $350,000 is urgently needed to advance the completion date of the design document. This project in the Village and Town of Mamaroneck and the Town of Sheldrake is the most critically needed project in Westchester County.

Westchester County Streams - Byram River

An appropriation of $300,000 is requested for continued planning and engineering for the highly vulnerable communities of Port Chester, New York, and Greenwich, Connecticut.

South Ellenville

An appropriation of $100,000 is requested for surveys and planning of a needed flood control project in the Village of Ellenville.

Navigation

Kill Van Kull and Newark Bay Channels Project (Construction)

Of the projects underfunded in the President's budget, none has a higher priority than the Kill Van Kull and Newark Bay Channel project. An additional $38 million is needed to improve the navigation through this vital water artery and to stimulate the growth of the commercial industrial sector that depends on it.

The proposed Federal Budget recommends $12 million in Fiscal Year 1987 as a start to a $291 million deepening of this project to a depth of 44 feet from its present depth of 35 feet. Given the long delay that has already occurred in realizing this improvement, we have requested the Corps to provide the urgently needed initial depth of 40 feet in two years.

The existing 35-foot Channel caused the grounding of a large containership. This is a critical factor in this project. The $12 million Budget recommendation appears to be seriously inadequate for completing a $109 million construction program in a reasonable period of time. The project calls for a widening of the junction of Newark Bay and the Kill Van Kull which is also used as a turning basin. It is essential that this improvement is completed in two years.

This is a matter of highest priority. Thus, we urge a Federal appropriation of $50 million for Fiscal Year 1987 to be matched by a non-federal share of $16.7 million to achieve this two-year schedule.

New York Harbor Collection and Removal of Drift Project (Construction)

With construction underway since 1976, the New York Harbor Collection and Removal of Drift Project (Waterfront Cleanup) is aimed at the removal of 2,230 sunken hulks and 149 decaying shore structures that are the sources of dangerous and costly harbor drift.

The recommended appropriation of $4,600,000 is an improvement. However, to keep pace with local targets and the availability of local financial resources, we request that a modest $400,000 be added, to allow for the completion of design work, and the initiation of construction in additional areas, for a total of $5,000,000.

Arthur Kill Channel Project (Study)

The Arthur Kill Channel Project will deepen the existing 35-foot deep channel to 41 feet to the Howland Hook Marine Terminal, and to 40 feet from the Howland Hook Marine Terminal to the major private users, the Exxon refinery in Bayway and the Gulfport Terminal on the Staten Island shoreline. The cost for these improvements has been estimated at $51 million in January 1985 dollars. An increase in study funding from $500,000 to $700,000 is needed to insure the timely completion of the project.

CIVIL WORKS PROGRAM

REQUESTED ADDITIONAL FUNDS FOR FISCAL YEAR 1987

PROJECT	TYPE	STAGE	FUNDS BUDGETED ($1000's)	FUNDS NEEDED ($1000's)	ADD'L FUNDS REQ. BY NYS ($1000's)
FLOOD CONTROL & BEACH EROSION					
Weschester County Streams - Mamaroneck & Sheldrake	FC	CP&E	350	750	400
Westchester County Streams - Bryam River	FC	CP&E	0	300	300
South Ellenville	FC	AE&D	0	100	100
Hoosic River, Mass., Vt. & NY	FC	Survey	0	230	230
Fire Island to Montauk Pt.	BE	Reform	0	1,500	1,500
Rockaway Inlet to Norton Pt. - (Coney Island area)	BE	Surveys	0	300	300
Dansville	FC	Construction	0	500	500
Tonawanda Creek	FC	Surveys	0	300	300
			350	3,980	3,630
NAVIGATION					
Arthurkill Channel - Howland Hook - Marine Term.	N	Surveys	500	700	200
Kill Van Kull & Newark Bay Channel - NY & NJ	N	Construction	12,000	50,000	38,000
Shinnecock Inlet	N	ADV. E&D	200	500	300
Gowanus Cr. Channel	N	CP&E	0	190	190
Fire Island Inlet	N	O&M	0	2,400	2,400
Buffalo Harbor	N	O&M	1,638	3,638	2,000
Dunkirk Harbor	N	O&M	0	275	275
Great Sodus Bay Harbor	N	O&M	0	220	220
Fire Island Inlet Jetty Reconstruction	N	Construction	0	2,000	2,000
NY Harbor Collection and Removal - of Drift	N	Construction	4,600	5,000	400
			18,938	64,923	45,985

MONDAY, APRIL 14, 1986.

IOWA, NEBRASKA, KANSAS AND MISSOURI PROJECTS

WITNESSES

JOHN O. MADGETT, PRESIDENT, MO-ARK ASSOCIATION, AND CHAIRMAN, WATER RESOURCES COMMITTEE, GREATER KANSAS CITY CHAMBER OF COMMERCE AND GROUP

ROBERT M. BENHAM, PRESIDENT, PLAZA MERCHANTS ASSOCIATION, BRUSH CREEK FLOOD CONTROL PROJECT, KANSAS CITY, MISSOURI

ELIZABETH BENHAM, KANSAS CITY, MISSOURI

J. C. HART, TREASURER, MO-ARK ASSOCIATION, BRUSH CREEK FLOOD CONTROL PROJECT, KANSAS CITY, MISSOURI

DON O. ELEFSON, R.L.D.S. CHURCH, FARM MANAGER, INDEPENDENCE, MISSOURI

Mr. BEVILL. Mr. John Madgett of the Missouri/Arkansas Basin is here. We are glad to have you with us. You may submit your written statement and have your group up here and proceed as you wish.

Mr. MADGETT. Robert Benham will be the first one to speak, Mr. Chairman, and also I would like to ask his young daughter, Elizabeth, who came with her daddy. Elizabeth, would you stand up?

Mr. BEVILL. Elizabeth, we are pleased to have you with us. We wish you would come on up here and sit, too.

Mr. MADGETT. She is here to see how the government works firsthand. We feel real good about her taking the opportunity.

Mr. MYERS. The things we do or don't do will affect her longer than others. What grade are you in, Elizabeth?

Ms. BENHAM. I am in the sixth grade.

Mr. BENHAM. This is Lisa's living civics lesson here today. We have been sightseeing and brought her along to see how it works.

Mr. BEVILL. She is a fine-looking little lady and we are pleased to have you with us.

Mr. MYERS. My daughter is a little younger than you. I brought them to Washington one time when I testified before this committee long before I thought about running for Congress. I said that I was going to take them to Congress. I said that they may never see it and two years later I was seated here and they came as a guest, like you. Look out. It could happen to you.

Mr. BENHAM. Thank you. It would be an honor, believe me. I am Robert Benham, President of the Country Club Plaza Merchants Association. I will paraphrase some comments from a prepared statement.

There is no need to read the entire thing. I represent a group of small to larger merchants, many of whom were devastated by the Brush Creek flood in 1977. The largest of their shops is 80,000 square feet. Most are much smaller.

Eighty-three percent of the shops are individually owned. I have two stores on the plaza. Most of us lost, of course, merchandise and fixtures but probably the most devastating loss for our stores and many others were financial records, most of which were stored in the lower levels of our stores.

For example, we had to write off about two-thirds of our entire accounts receivable which financially devastated the store for nearly five years. As a little bit of background, the Country Club Plaza is the Nation's oldest and finest shopping center. One might get an argument from Dallas on that, but we happen to think it is.

What Fifth Avenue is to New York, and the Miracle Mile of Chicago, the Country Club Plaza is to Kansas City. It was founded in the twenties. It has been there for more than six decades and it has been devoted to providing quality goods and services, for example, and might add employment to Kansas citizens for all those years.

Many businesses didn't survive the flood. As a matter of fact, in our case one of our stores did not survive the flood financially and had to be bailed out and has now completed its flood recovery which took nearly six years.

I think most of us could not survive another flood of equal magnitude. As a matter of fact, every time it rains and we get one of those soakers in Kansas City, I find myself laying awake in bed at night and calling security to see how high the water has risen.

I should also add during heavy rains our customers stay away to this day because of their concerns about Brush Creek. The Country Club Plaza is very important to Kansas City. It is an important part of the tax base.

It attracts commercial development. It provides jobs to thousands of people. In many ways, it is the very heart of Kansas City.

The Plaza merchants very much appreciate your support in assuring we will never have to endure such economic and personal devastation again.

Thank you very much.

Mr. BEVILL. Very good.

[The statement of Mr. Benham follows:]

[redacted]

HALLS CROWN CENTER · HALLS PLAZA · SWANSONS

ROBERT M. BENHAM
President

April 8, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Energy
and Water Development
Washington, D.C. 20515

Dear Mr. Bevill:

As President of the Country Club Plaza Merchants Association, I represent a group of small to larger merchants, many of whom were devastated by the Brush Creek flood of 1977. The largest of their shops is 80,000 square feet, most are much smaller. Eighty-three percent of the shops are individually owned.

The 1977 flood resulted in a $58,355,000 damage and business loss to merchants in the Plaza area. It was not a flood in which the water rose gradually, allowing for evacuation of people and valuables. There was no forecasting the anticipated hour of the crest. A wall of water suddenly crashed into the Plaza with such force that it tossed uprooted trees and automobiles about as if they were toys.

As water poured into the Plaza, it extinguished pilot lights and gas backed up in the lines until they exploded, demolishing most of an entire block.

When we think of flood damages, we normally think of furniture, buildings, clothing and other personal possessions, etc. In the cast of businesses, we also think of the loss of fixtures and merchandise. Of course, the Plaza merchants suffered all of these obvious losses but the Brush Creek flood taught them that when businesses are flooded there are other, equally devastating, if less visible, losses. For example, merchants who had charge customers lost all

200 East 25th Street · Kansas City, Missouri 64108-2598 · (816) 274-8345

of the records of their accounts receivable, which meant that they would never be paid for much of the merchandise they had already sold.

The Country Club Plaza is the nation's oldest and finest shopping center. What Fifth Avenue is to New York, and what the Miracle Mile is to Chicago, the Plaza is to Kansas City. For more than six decades it has been devoted to providing quality goods and services. Since its shops deal primarily in expensive goods, the monetary loss per square foot of merchandise was staggering. But I feel I should mention here that the fact that merchants deal in expensive merchandise doesn't mean they enjoy any greater profit than those dealing in moderately priced or inexpensive merchandise.

A few businesses didn't survive the flood, but most of them reopened and they reopened faster than anyone dreamed was possible. The courage and dedication of the merchants who fought their way back is almost unimaginable. They not only had the heartbreaking and backbreaking job of the clean-up, they also had to scramble for merchandise to sell when they reopened, and they had to devote long, tedious hours to trying to piece together the many kinds of records necessary to running a business. Above all, they had to find ways to survive financially. Since a flood was the last thing they expected, almost all of them had no flood insurance and so had to bear their losses personally.

The Country Club Plaza is very important to Kansas City. It is an important part of the tax base. It attracts commercial development. It provides jobs to thousands of people. In many ways, it is the very heart of Kansas City. The Plaza Merchants very much appreciate your support in assuring that we will never have to endure such economic and personal devastation again.

Yours very truly,

Robert M. Benham

RMB:bf

Mr. **Madgett**. Mr. Hart.

Mr. **Hart**. Thank you.

Mr. Chairman, our leaders that we have had for several years came before you. Mr. Perrimore, we are sad to report, passed away about two months ago. But we do have a very able-bodied leader who is leading us now and that is Mr. Madgett.

Speaking of the Plaza, Mr. Benham touched on some of the things I probably wanted to touch on, but I won't dwell on that too much.

We do want to mention the fact of the Indian Creek over in Johnson County which had severe flooding a couple years ago and secured worldwide attention. There were some pictures in Paris of flooding in Overland Park of people holding on to the posts. I have filed a statement for the county commissioners of Butler County at El Dorado, and they are asking for and hoping for continued funding of the Douglas Lake near Augusta.

It states this project is important to the continued water supply for Butler, Cedric Howley and possibly Sumner County in Kansas. We have filed a statement to that effect.

I want to take this opportunity to mention, and it will be mentioned again, Turkey Creek over in Kansas. Flooding in that area will be mentioned by Mr. Madgett, I believe, in a statement from the Mayor of Kansas City, Missouri. We were hoping somebody would be here from Congressman Myers office, but I haven't seen any of them yet, but I do want to take this opportunity to thank you for letting me appear before you.

I have been coming back here twice a year since 1949 in support of these flood projects. Thanks again.

Mr. **Bevill**. Thank you.

Mr. **Madgett**. Mr. Elefson.

Mr. **Elefson**. I am indeed pleased also to appear before you.

I am here representing Bishop Hansen of the R.L.E.S. Church. We have been a part of the Mo-Ark route since 1950 or 1951 when it was organized. We are very pleased to support all of the projects and particularly the ones that have been mentioned thus far. Our particular interest at this time is in the Little Blue River project in the eastern part of Jackson County.

This incorporates a good deal of the City of Independence and Blue Springs and Lee Summit, et cetera, et cetera. That project has three different segments, two lakes, and one channel improvement of one of the lakes has been completed and the channel improvement project has been completed. The other lake is well underway and we are very, very pleased with what has happened.

We are encouraging you to continue the appropriations to finish the second lake and I just would like to re-emphasize what an earlier speaker said relative to another flood project and that is that when the people of the area begin to realize the values of the flood projects, it is a very positive thing for the communities.

I not only see a positive reaction from them, but I see the communities themselves making longer term plans and projections and objectives. I just want to express an appreciation for what has happened and we may be back again.

[The statement of Mr. Hansen follows:]

PEACE

[illegible] CHURCH OF JESUS CHRIST [illegible]

THE PRESIDING BISHOPRIC

TO: THE PUBLIC WORKS SUBCOMMITTEES ON APPROPRIATIONS OF THE UNITED STATES SENATE AND THE UNITED STATES HOUSE OF REPRESENTATIVES

STATEMENT OF: FRANCIS E. HANSEN, PRESIDING BISHOP, OF THE REORGANIZED CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS

Thank you for this opportunity to submit a statement in support of the "Plan of Improvement for Flood Control and Water Resources for the Little Blue River" in Jackson County, Missouri.

As this project which is so important to the Communities of the Little Blue Valley now nears completion we wish to express our very sincere thanks. The support you have given in the past provides the opportunity for long term planning of the valuable land resource of these communities and the families whose lives are affected.

The channel improvement portion of this project is now fully completed. There is the necessity however, of a $3.8 million appropriation for one of the final completion stages of the last two (2) Lakes. We request that this amount be included in the 1987 fiscal year appropriations.

Respectfully submitted,

Francis E. Hansen

Francis E. Hansen, Presiding Bishopric
Reorganized Church of Jesus Christ
of Latter Day Saints

April 14, 1986

WORLD HEADQUARTERS • THE AUDITORIUM • P.O. BOX 1059 • INDEPENDENCE, MISSOURI 64051 • TEL. [illegible]

Mr. BEVILL. We appreciate that fine statement. Does that conclude the statements, Mr. Madgett?

Mr. MADGETT. I am going to read my whole statement, Mr. Chairman.

I am John Madgett, and I am appearing on behalf of the Mo-Ark Association and as the Chairman of the Water Resources Committee of the Greater Kansas City Chamber of Commerce. I will be summarizing the statements given this committee by interested parties, some of whom have testified in person, and some of whom have sent written statements.

Your committee was in a position last year to authorize funds for a study that would alleviate a recurring and unnecessary loss in the Brush Creek area. A loss that includes resources, finances, and human lives. Those funds were authorized with your help and very much appreciated. We are here to express our appreciation and to request that the funds be authorized to continue those studies to their completion and the subsequent construction necessary.

Part of the funds appropriated were for a pre-authorization study of Turkey Creek. The headwaters of Turkey Creek are almost entirely in the State of Kansas. But there are severe restrictions in the Turkey Creek channel, resulting in heavy flooding in Missouri along Southwest Boulevard where many small businesses are located.

Kansas City, Kansas, shares our concerns and has indicated its support for this study.

Also, as President of Missouri-Arkansas Flood Control Association, an organization which has been appearing before your committee for 35 years—I think Mr. Perrimore, if he had made this committee meeting, would have made this his 34th year.

We now have members from the States of Nebraska and Iowa, as well as Missouri, Arkansas, and Kansas. I would like to respectfully ask the Congress to appropriate the monies to continue and complete the funding capabilities of the Corps of Engineers in the Kansas City District for the fiscal year 1987.

Unfortunately, we cannot legislate love for our land and concern for our environment for future generations like Lisa over here. That can only be taught by the people who precede us and the concern of the individuals who control and operate the present finished public works projects. Millions and billions of dollars have gone into the completed works.

We must plan now and continue to plan to conserve our water resources. We can profit from personal experiences and others' mistakes. According to a report issued recently by the United National Economic Commission for Europe, water resources in some European countries are no longer sufficient to meet their demands.

East Germany, Hungary, Malta, Cyprus and the Ukraine are the countries which can no longer count on water resources to meet needs. By the year 2000, Belgium, Bulgaria, Luxemburg, Poland, Portugal, Romania and Turkey will probably be unable to meet growing demands. Modern lifestyles and pollution are blamed for this problem, and needless to say, the countries are launching all-out programs to increase resources and curb pollution—we hope not, but possibly, too late.

We have been blessed in the United States with abundant resources. But resources are not limitless. It is this generation's responsibility to do what we can to help preserve them, pass on our inheritance to people like Lisa here, of finished works already in place, and instill our concerns for the natural resources and environment in future generations to come.

Mr. Chairman, we are here to tell you these last two paragraphs I have just recited sound a little corny, but we are dead serious about it. I am sure we can count on your committee to join with us in planning and appropriating the funds necessary to protect those works already in place and to continue to plan for the future generations to come.

We just don't want to get caught short, Mr. Chairman. We thank you very much for the time that you have given us. I think we finished on time this time.

[The supporting documents of the Mo-Ark Association follow:]

TO: United States House of Representatives
Committee on Appropriations

Hon. Tom Bevill, Chairman
Subcommittee on Energy and Water Development

Mr. Chairman,

My name is Ray Kirk. I am a past president of the MO-ARK Association. Currently I am the chairman of the Flood Control & Water Conservation Committee of that organization. Also, I farm approximately 1600 acres of Missouri River bottom land.

This statement is in support of all the water development and conservation projects supported by the MO-ARK organization.

For the past 35 years MO-ARK has been the leading water resources development organization in the Mid-west. We've had the concern, the courage, and the commitment to publicly and politically express our views on development of water resources. Some views may be diverse, they may be opposite, but it has been the expression of views by citizens that has guided Congress in its authorization of these projects.

These authorizations have brought to the Mid-west and to the nation a wide utilization of water, of control of water, and plans for assuring that our future generation will also have these same resources.

Though much has been accomplished in the past, there are many projects which must be completed and many more officially recommended plans which need the consideration and support of this committee, i.e., continued development of coordinated comprehensive flood control plans, soil conservation, watershed programs, water supply, water quality, and practical navagation projects.

Flood control and other inter-related water resource developments have greatly contributed to the vitality and progress in the Mid-west and the nation. Because of the foresight of local citizens and members of Congress, works have been completed which protect our people and property and greatly enhance the quality of life.

There is much work to be done, however. I, therefore, respectfully urge the Congress to appropriate monies to continue and complete these vital public works projects.

I thank you for your time and attention.

Ray Kirk, Chairman
Flood Control and Water
Conservation Committee
MO-ARK Association

STATEMENT TO HOUSE OF REPRESENTATIVES
ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS
TOM BEVILL, CHAIRMAN
PRESENTED BY MAYOR RICHARD L. BERKLEY
CITY OF KANSAS CITY, MISSOURI
MONDAY, APRIL 14, 1986

The City of Kansas City, Missouri, is extremely proud of the attention given to our serious flooding problems by this Committee.

We thank you for the starts on the Blue River Channel Improvement project. Construction is well underway and, although bank stability problems have arisen, the problems have been resolved by the Corps of Engineers with equal dispatch.

The appropriation of $350,000 for Fiscal Year 1986 for the Continued Plan and Study for the Brush Creek channel project is most timely and we are working with the Corps of Engineers to expedite this planning process. Here is a good example of the shift from federal to local financing. We are pushing to achieve some relief before another disastrous flood of 1977, which caused the death of 25 persons and damages amounting to $66.4 Million. We urge that the authorization bill now before you be passed. It contains the necessary approval of this project so desperately needed.

We also thank you for the federal appropriation of $200,000 in Fiscal Year 1986 for further studies of the Upper Blue River Basin. The studies are just now reaching the hearing stage for input of information and concern. I expect the Council will soon have a Resolution of support to present for the record on these studies.

We are also thankful for the appropriation of $310,000 for the reconnaissance study of Turkey Creek. Although the headwaters of Turkey Creek are almost entirely in the State of Kansas, the severe flooding occurs in Missouri along Southwest Boulevard where many small businesses are located. This flooding results from severe restrictions in the Turkey Creek channel. When the creek overflows its banks, the overflow flood waters bypass the Greystone Heights diversion tunnel and flood Southwest Boulevard. Kansas City, Kansas, also shares our concerns and have indicated their support for this study.

Mr. Chairman and Members of the Energy and Water Development Sub-Committee on Appropriations, the City of Kansas City, Missouri, lies in three counties and is the largest single municipality in our metropolitan area known as Kansas City. We historically have had a very good record of independent action to solve our own problems. However, flood water recognizes only the boundaries permitted by nature. Because of the state line, our five adjoining counties, and over 110 municipalities, we need your help. This can best be accomplished by the skills and talents available through the auspices of the U.S. Army Corps of Engineers. This can only be realized by Congress authorizing these most needed flood protection projects.

The City supports the several projects in Missouri and Kansas for which our delegation is appearing today. We further appreciate the opportunity to express our opinions to you regarding the Authorization and Appropriation Bills. We urge your realistic support of these projects and thank you very much for your consideration.

TOM M. LINOT, 1st District
Route 1, Box 78, Rose Hill, Kansas

E. W. NATH, 2nd District
Rt. 1, Box 116, Augusta, Kansas

BART HOGOBOOM, 3rd District
Rt. 1, Box 219, El Dorado, Kansas

BUTLER COUNTY, KANSAS
COURTHOUSE
EL DORADO, KANSAS 67042

April 8, 1986

Congressman Tom Bevill, Chairman
Sub-Committee on Energy & Water Development
Washington, D.C.

Dear Congressman Bevill:

We urge you to support our efforts to make the Douglass Reservoir Project become a reality.

Your support for continued planning budget funds for 1987 would be very much appreciated. This project is important to the continued water supply for Butler, Sedgwick, Cowley and possibly Sumner Counties.

Colonel Tillotson from the Tulsa Corps of Engineers recently met with Butler County Commissioners and over 75 people from this area who might benefit from water supplied by the Douglass Reservoir, to update all of us on this project.

There is a tremendous amount of enthusiasm for this project, so any support you can give will be beneficial to many citizens in this area.

Sincerely,

BUTLER COUNTY BOARD OF COMMISSIONERS

E W Nath
E. W. Nath, Chairman

Bart Hogoboom
Bart Hogoboom, Commissioner

Tom M Linot
Tom M. Linot, Commissioner

jb

Mr. **Bevill**. You did. We appreciate that. We will be looking forward to seeing you again next year and we will certainly work with you and do the best we can to help you with these flood projects. That is one of the best investments I think our Federal Government makes.

Mr. **Madgett**. We agree 100 percent.

Mr. **Bevill**. Thank you very much for a very fine presentation.

Monday, April 14, 1986.

ADVANCED ENERGY CONCEPTS

WITNESS

CHARLES RHODES, PROFESSOR, UNIVERSITY OF ILLINOIS

Mr. **Bevill**. Dr. Charles Rhodes. Dr. Rhodes, we are pleased to have you with us and we are calling you a little ahead of schedule. We saw you in the audience and you may just submit your prepared statement and proceed as you wish.

Mr. **Rhodes**. I have done so.

Mr. Chairman, I am Charles Rhodes. I am what is known as a research professor at the University of Illinois in Chicago. I appear before this committee as a person who has experience in research matters at the Department of Energy and I come this afternoon specifically to direct my comments toward an element in the program known as a division of advanced energy projects. It falls under the basic Energy Sciences Office and I believe that is under the umbrella of the overall Energy Research Office, the Director of which is Dr. Alvin Trivelpiece.

The excellence of that division's work has been put before this committee on March 11 by Dr. Trivelpiece and seems pointless to review that. What I think is needed, though, is some understanding of the nature of the unique mission of that group and more importantly perhaps the philosophy guiding its activities.

By I think an intrinsic and very well established nature, bureaucracies and the people in them tend to avoid risk. They will do anything to minimize the risk and expose themselves to any criticism, no matter how minor.

In my own experience, such people commonly behave like a cat who inspecting a chair recently brought into the household and confirm its inertness will sniff the leg of the chair before then jumping up into the seat for a nap.

This sort of process of selection tends to produce—I guess I would regard this as a process of intellectual limitation which tends to produce the worst kind of research and the most limited form of advance. At best, it will lead you to incremental advances and often to a confirmation of the known, sort of the antithesis of what I regard as advanced research.

I point out in the testimony that Galileo's experience with the church several hundred years ago I think represents this kind of reaction best. Modern Galileos don't face excummunication, they simply go unfunded.

The decision-making governing supported Government research for advanced energy projects, however, happily reverses the gears of this normal bureaucratic practice by understanding that risk and reward correlate together in a way similar to that in the financial world.

They escalate the risk in a reasonable way to high levels and thereby give an opportunity for correspondingly amplified payoff. That it can be done successfully is I think well documented in the testimony of Dr. Trivelpiece.

The main weakness of scientific research in this country is not technical, but philosophical. We have enormous technical means.

The national laboratories, the weapons laboratories, represent the Roman army of technical power. On the other hand, the decision-making governing the use of those resources and those powers embraces areas far outside the wisdom of narrow scientific reasoning.

It is in this way that the advanced energy projects make a very strong contribution. The process of discovery is not simply finding answers to a fixed problem. It really is a formulation of that problem and a list of questions, a sequence of a list of questions that really define what the problem is.

There is speculation and enhanced risk. It is this understanding that enables advanced energy projects to make the very substantial contribution they do, although the resources for that are actually quite meager.

In fiscal year 1986, the past year, the Congress reduced the request of the Administration by $3 million for that division, a severe reduction, approximately 30 percent. Fortunately, this spilt milk can be poured back into the glass by increasing this year the corresponding amount to the Administration request.

Oddly, the 1987 budget request does not call for this. I, individually and I think others would strongly disagree with that sentiment. My recommendation to you this afternoon is that you restore the appropriation to the 1986 request which would mean adding $3 million.

Mr. Chairman, this concludes my testimony. I will be happy to answer questions.

[The statement of Mr. Rhodes follows:]

STATEMENT BY

CHARLES K. RHODES

RESEARCH PROFESSOR OF PHYSICS

UNIVERSITY OF ILLINOIS AT CHICAGO

BEFORE THE

ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE

HOUSE APPROPRIATIONS COMMITTEE

APRIL 14, 1986

OFFSET
CAMERA COPY

Mr. Chairman, I am Charles K. Rhodes, a research professor of physics at the University of Illinois at Chicago. As an individual with considerable experience with research in the Department of Energy, I appear before this Committee to speak specifically about the Division of Advanced Energy Projects (AEP), an important unit in the Basic Energy Sciences (BES) program of the Office of Energy Research.

The facts demonstrating the scientific excellence of the Division of Advanced Energy Projects have already been documented for the Committee and appear in the testimony given by Dr. Alvin W. Trivelpiece, Director of Energy Research, to the House Appropriations Committee on 11 March 1986. No further elaboration of these specific data is necessary. What is needed, however, is an understanding of the unique mission served by AEP, and particularly the underlying philosophy of operation which has earned for that Division a prominence far out of proportion with the relatively small level of resources authorized by Congress.

By an intrinsic and well-established nature, bureaucracies and members thereof have an irresistible tendency to avoid risk. Risk, which implies potential for uncontrolled change, is generally viewed with dread. They behave like a cat who, in order to confirm its inertness, gingerly sniffs the leg of a new chair brought into the household before jumping onto the seat for a nap. Consequently, research themes with relatively predictable outcomes gain favor for bureaucratic selection, a process of intellectual limitation which tends toward incremental advance or simply confirmation of the known. Galileo's experience with the Holy Office in Rome well illustrates the common response of such large institutions to the new, imaginative, and unexpected. By uniting the terrestrial and celestial spheres, he moved into a canonically forbidden zone, and the perceived threat to the dogma was ferociously resisted. Modern Galileos do not face excommunication, they just go unfunded.

In the decision-making governing the support of research, the Division of Advanced Energy Projects reverses the gears of normal bureaucratic practice. With an understanding of the elementary equation stating that reward correlates with risk, in a manner not unlike that characteristic of the financial world, risk is purposely and reasonably elevated to a high level, thereby ensuring the opportunity for a correspondingly amplified payoff. That this can be accomplished with spectacular success is amply shown in the factual testimony of Dr. Trivelpiece.

The main weakness of scientific research in the United States is not technical but philosophical. Enormous scientific capabilities are at hand, but the criteria governing the effective use of these powers must incorporate a range of considerations and judgments far exceeding the narrow wisdom of pure technical reasoning. Furthermore, the process of discovery is not just the finding of a solution to a given problem. The essential creative act generally involves the formulation of questions rather than solutions. As Darwin stated, this requires abundant speculation, and consequently, a high tolerance for risk in the outcome. The basic research problem then becomes transformed into the problem of formulation of the fundamental questions which describe the issue of interest rather than a determination of answers. Indeed, problems properly posed in this way very often automatically generate their own solutions. By understanding the processes and ingredients which activate the mechanisms of human creativity, the Division of Advanced Energy Projects responds to the philosophical need that is so important to any research enterprise hoping to make genuine advances in the exploration of new areas of knowledge. In this way, the Division plays an extremely important and unique role in American science. It is this sole vital factor which explains the extraordinary success of the Division's work described in the testimony of Dr. Trivelpiece.

For FY1986, the Congress reduced the request of the Administration by 3M$ for AEP, a severe reduction in the program. Fortunately, this spilled milk can be poured back into the glass in FY1987 by restoration of that amount. Oddly, the FY1987 request for AEP, with which I disagree, does not call for this increase. It is my recommendation to this Committee that, in recognition of the unique merit and mission of the Division of Advanced Energy Projects, an increase of 3M$ be added to the FY1987 request, a figure that would restore the resources to the level of the Administration's FY1986 request.

Mr Chairman, this concludes my testimony. I would be glad to respond to any questions the Committee may have.

General References

1. Ernst Mayr, The Growth of Biological Thought (Belknap Press, Cambridge, MA, 1982) pp. 829-858.

2. J. D. Bernal, Science in History, Vol. 1, "The Emergence of Science" (MIT Press, Cambridge, MA, 1954).

3. Howard E. Gruber, Darwin on Man, "A Psychological Study on Scientific Creativity" (Dutton and Co., New York, 1974).

4. Susan F. Cannon, Science in Culture (Science History Publications, New York, 1978).

5. Robert Hughes, The Shock of the New (Alfred A. Knopf, Inc., New York, 1981).

Mr. **Bevill**. Thank you very much, Doctor. We will certainly consider everything you have recommended here and I hope we can comply with your request.

Thank you very much.

Mr. **Rhodes**. Thank you.

Monday, April 14, 1986.

ROCHESTER, MINNESOTA, PROJECT

WITNESSES

HON. TIMOTHY J. PENNY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

PETER SOLINGER, ROCHESTER, MINNESOTA CITY COUNCIL

CHUCK HAZAMA, MAYOR, ROCHESTER, MINNESOTA

Mr. **Bevill**. Our good friend and colleague, Timothy Penny, is here. We will recognize you and you can get your group up here and proceed as you wish.

When Congressman Oberstar gets here he can just join you.

Mr. **Penny**. Mr. Chairman, and members of the subcommittee, thank you for honoring our request to appear today to discuss the South Fork Zumbro River flood control project in Rochester, Minnesota.

Allow me to say at first, Mr. Chairman, how appreciative we are of the committee's ongoing assistance in allocating the necessary planning funds over the past few years.

My colleague from Minnesota, Mr. Oberstar, and these Rochester officials are here to ask for your further consideration in making the South Fork Zumbro flood control project a reality through start-up appropriations.

The citizens of Rochester have been patient throughout the authorization process and are very optimistic now since both houses of Congress have passed water resources legislation. The citizens of Rochester are to be commended for preparing to meet the local financial demands of the project by accepting a sales tax—the proceeds of which have been earmarked for this flood control project.

The local efforts have been spearheaded by a number of very able leaders in the Rochester community, two of whom are here today: Chuck Hazama, Mayor of Rochester, and Peter Solinger, Councilmember and Chair of the Flood Control Committee. Mr. Hazama and Mr. Solinger are most capable of presenting the city's case. I am pleased to introduce them to you.

Mr. **Bevill**. Be glad to hear from each of you. Your prepared statements, by the way, will be made part of the record and you may just summarize or proceed as you wish.

Mr. **Solinger**. Thank you, Mr. Bevill.

I will summarize as much as I can. It is a very short statement.

Honorable Chairman Bevill, and members of the subcommittee, as you know, my name is Pete Solinger, Councilman and Chairman of the Flood Control Committee, and I have been chairman for a number of years. I thank you for the opportunity to appear before you on behalf of Rochester to respectfully urge your approval of the appropriation for the South Fork Zumbro River Project in Rochester, Minnesota.

As Representative Penny said, it has been passed in both the House and the Senate. Rochester is a southeastern Minnesota city of 60,000 which is located on the South Fork of the Zumbro River. Four major streams enter the Zumbro River in the Rochester city limits. Almost one-third of the city is located in the flood plain. The city has suffered substantial flooding throughout its history. Since 1951, the Zumbro has left its banks 13 times; an average of once every 1.5 years.

The House Committee on Public Works and Transportation report dated August 1, 1985, includes an estimate that property damage from a single 100-year flood occurrence in Rochester would be $101.7 million, which would pose a severe threat to the life and security of the residents. I am here to say that this threat already became a reality in July of 1978. The July 1978 flood devastated our community.

The City has been working since 1952 with the Army Corps of Engineers to develop a plan to alleviate this flooding problem. We sincerely hope that the inclusion of the South Fork Zumbro River in the 1987 budget represents the light at the end of the tunnel.

I appeared before our first authorization bill in 1977 which was the year before our disastrous flood. The City has been a constant supporter of this project throughout this long process, despite the substantial increases in the local cost share for this project from $2.6 million in 1971 to $7 million in 1978 to $15 million in 1986.

We have by referendum upfront money we have appropriated for our local cost sharing. We have $5 million in our pocketbooks right now and with it coming in regularly with one-half percent sales tax.

The city has been supportive of the attempts made by the House of Representatives to maintain local cost sharing provisions at a level which can be afforded by the participating local units. The city is supportive of the House cost sharing provisions relating to this project and believes that they reflect a reasonable balance between the Federal Government's need to stretch Federal dollars and the local government's ability to pay them.

The Appropriations Committee has approved continued engineering and design funds in previous years.

We again ask your support to approve this appropriation for the South Fork Zumbro River Project.

I would respectfully ask if our mayor could say a few words.

[The statement of Mr. Solinger follows:]

STATEMENT
IN SUPPORT OF
THE SOUTH FORK ZUMBRO, MINNESOTA
CORPS OF ENGINEERS PROJECT
BEFORE
THE SUBCOMMITTEE ON ENERGY
AND WATER DEVELOPMENT
OF THE
APPROPRIATIONS COMMITTEE
BY
COUNCILMEMBER PETER SOLINGER
APRIL 14, 1986

Honorable Chairman Bevill and Members of the Subcommittee:

My name is Peter Solinger, Councilman of the City of Rochester and Chairman of the City Flood Control Committee. Also with me representing the City is our Mayor, Chuck Hazama.

I thank you for the opportunity to appear before you on behalf of Rochester to respectfully urge your approval of the appropriation for the South Fork Zumbro River Project in Rochester, Minnesota. I would also like to mention that in addition to the approval granted to this project by the House of Representatives in 1985 under H.R.6, this project has also recently been included in the Senate Water Projects authorization bill S.1567 which was approved on March 26, 1986. This project has also been included as a new construction start in the President's proposed budget for 1987.

Rochester is a southeastern Minnesota city of 60,000 which is located on the South Fork of the Zumbro River. Four major streams enter the Zumbro River in the Rochester city limits. Almost 1/3 of the City is located in the floodplain. The City has suffered substantial flooding throughout its history. Since 1951, the Zumbro has left its banks 13 times; an average of once every 1.5 years.

The greatest threat of flooding in Rochester comes from summer rain storms. Heavy rainfall creates a flash flood condition which is impossible to prepare for and which does not allow for adequate warning or evacuation of residents.

The House Committee on Public Works and Transportation report dated August 1, 1985, includes an estimate that property damage from a single 100-year flood occurance in Rochester would be $101.7 million, which would pose a severe threat to the life and security of the residents. I am here to say that this threat already became a reality in July of 1978. The July, 1978 flood devastated our community. Simple statistics alone do not accurately reflect the magnitude of the problems caused by the 1978 flood, but may nevertheless be enlightening. The 1978 flood took 5 lives in Rochester; it caused over $60 million in property damage in 1978 dollars; more than 2,200 homes were flooded; over 200 businesses, 21 industries, and 10 public buildings were also flooded. Many of the businesses never re-opened. The City's electric power plant, wastewater treatment plant, and water supply system received major damage which caused further hardships to the entire community.

The City has been working since 1952 with the Army Corps of Engineers to develop a plan to alleviate this flooding problem. We sincerely hope that the inclusion of the South Fork Zumbro River in the 1987 budget represents the light at the end of the tunnel.

The City has been a constant supporter of this project throughout this long process, despite the substantial increases in the local cost share for this project from $2.6 million in 1971, to $7.0 million in 1978, to $15 million in 1986. This increase in the local cost can only be absorbed with great difficulty, but it is a commitment which the community has been willing to make. In 1983, the citizens of Rochester approved by referendum a special tax to finance the local cost share for the flood control program. The City has collected approximately $5 million dollars thus far for the local City cost share required for the flood control program. Although we have quite a ways to go to equal the total local cost for this project, we believe that these efforts by our citizens to raise the local funds in advance of final Congressional approval indicates both the need for the project and the high degree of committment on the part of the community to complete this project. We are, therefore, ready and willing to undertake the South Fork Zumbro River Project. We sincerely request your approval so that this project can begin construction in 1987.

The City has been supportive of the attempts made by the House of Representatives to maintain local cost sharing provisions at a level which can be afforded by the participating local units. The City is supportive of the House cost sharing provisions relating to this project and believes that they reflect a reasonable balance between the federal governments need to stretch federal dollars and the local government's ability to pay.

The Appropriations Committee has approved continued engineering and design funds for this project in previous years, including FY 1985 and FY 1986. This funding will enable the Corps of Engineers to proceed promptly in FY 1987 to let bids on the first construction stage. This past support of the House

Appropriations Committee is appreciated in Rochester. We again ask your support to approve this appropriation for the South Fork Zumbro River Project.

Chuck Hazama
CHUCK HAZAMA, MAYOR

R J Postier
RICHARD J. POSTIER
COUNCIL PRESIDENT

Peter Solinger
PETER SOLINGER, CHAIRMAN
FLOOD CONTROL COMMITTEE

Mr. **Hazama**. It is my pleasure to say a few words. We have an acronym for our city, but it doesn't stand for the District of Columbia. Our "D.C." stands for determination and a lot of caring, simply because of the projects we have worked on through the entire community.

Let me tell you about determination, first of all. Ike and Zeke were standing on top of a garage when the flood waters were going down the Zumbro and Ike turns to Zeke and says this is going to be one heck of a flood in 1978. Of course, floatation tanks were going down, tree trunks, Canadian geese and everything else.

All of a sudden Ike turns to Zeke and says, "gee, what the heck is that on the surface of that water?" It was a straw hat going back and forth, back and forth. Zeke says, "don't mind that straw hat. That is my grandfather. He said he was going to mow the lawn come hell or high water."

That is the kind of determination we have had in regards to this whole flood control project. We are determined to try to make this possibly work for us.

Mr. **Bevill**. I heard on the news this morning you had eight feet of snow up there.

Mr. **Hazama**. That is International Falls.

Mr. **Bevill**. What is that going to do to you with respect to flooding?

Mr. **Hazama**. We have been very fortunate in that we have had a fairly dry spring. We haven't had saturated ground like we had in 1978 when we had six inches of rain that flooded the entire area.

Another story I would like to present to you is about little Johnny who was sitting on the side of a street when a beautiful, bright, red car drove up. He ran up to the gentleman who came out with a three-piece suit and said, "Gee, that is a fancy car. What kind of car is it and how much does it cost?"

Well, the gentleman looked at that little kid and said, "First of all, son, you have got to tell me your name and how old you are."

So the boy turned around to the gentleman and said, "My name is Johnny. I am ten-years-old."

So he told him the name of the car and he told Johnny, "But I don't know what this car costs."

So Johnny, flabbergasted, looked at him and he said, "You mean to tell me you drive around in a great, big, beautiful car like this and you don't know how much it costs?"

He answered, "That is right. I don't know."

Johnny asked, "How can that be?"

"Fortunately for me, I have an older brother who owns a car manufacturing company and every year when the first car rolls off, he gives me the car."

Most of us adults would respond by saying, "Gee, what luck", or "Gee, so nice to have a big brother like this."

But Johnny had a little different perspective. He responded by saying, "You know, sir, some day I want to be like your big brother." The gentleman was quite taken back, with a ten year old boy to have a perspective like this.

He said, "Johnny, would you like to ride in my car?" and Johnny took that chance and said, Boy, would I love to!"

"Where would you like to go?" "I would like to show my little brother this car."

"Where do you live?" "Up on the hill where the apartments are."

So they drove up there and it wasn't too long before they came up to the apartment and he pointed up to the third floor and said, "We live up on the third floor. I want to get my little brother."

In a few minutes he came back with his brother to the front of that apartment building.

And the gentleman saw that Johnny's younger brother was on his shoulders and as he got closer to the car, he finally realized that Johnny's younger brother was crippled, and his legs were gnarled and he probably would never walk again.

As he got closer to the car, he heard Johnny say to his brother,"Bobby, some day I want to get a car like this just for you."

And to me that really signifies the kind of caring attitude we have in the city because there were people living up on the hills who have no need for any flood control project but were ready to vote for the half percent sales tax to have up front money before our appropriations if they were given us in appropriations and authorization to get their project done through Congress.

We have a community that does care. People are interested in getting that whole flood control project resolved because we lost five lives in 1978 and about $60 million in damage.

And for the sake of our community and for the support they have given us, I think it would make us proud to say that I think people in Washington do care about what happens in our City of Rochester.

Thank you very much.

Mr. **Bevill**. Very good. Thank you.

Mr. **Penny**. Mr. Chairman, I understand Congressman Oberstar is tied up with another commitment, but he has sent his written testimony.

Mr. **Bevill**. Yes, I just received it and he is very supportive, of course, of your position, and we will put his statement in the record at this point.

[The information follows:]

JAMES L. OBERSTAR
8TH DISTRICT, MINNESOTA

COMMITTEES:
PUBLIC WORKS AND TRANSPORTATION

CHAIRMAN:
SUBCOMMITTEE ON INVESTIGATION AND OVERSIGHT

MERCHANT MARINE AND FISHERIES

Congress of the United States
House of Representatives
Washington, DC 20515

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April 14, 1986

Hon. Tom Bevill, Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
U.S. House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I join with the representatives from the City of Rochester, Minnesota, appearing before you this afternoon, in support of the Corps of Engineers' request for $1.4 million for the South Fork Zumbro River Project.

I have worked with the City over a number of years to provide authorizing language, and was able to include that language in Title III of H.R. 6, the Water Resources Conservation, Development, and Infrastructure Improvement and Rehabilitation Act which is ready for conference. If I am named a conferee, as I hope, I will strongly support retention of this language in the final bill.

This city of 60,000 has experienced serious flooding in the past, on an average of once every one and one-half years, and could suffer extreme disaster in the future without this project. The 1978 flood alone took 5 lives, and caused over $60 million in property damage -- in 1978 dollars. More than 2200 homes, 200 businesses, 21 industries and 10 office buildings were seriously damaged. A repeat of a flood of this magnitude must be avoided, and we dare not wait longer to begin work on the project.

The community has enthusiastically supported the project, with patience and perseverance, and has dedicated a city sales tax specifically to accumulate the local share, which now could reach $15 million. The City has raised $5 million, and has pledged to find the remainder, despite the considerable fiscal hardships such a sum will cause.

The Corps of Engineers supports the project as well, and has requested $1.4 million for Fiscal Year 1987.

I support this request, and urge you to give it, and that of the City of Rochester, your fullest consideration.

With all best wishes.

Sincerely,

Jim Oberstar
James L. Oberstar, M.C.

Mr. PENNY. Thank you, Mr. Chairman.

Mr. BEVILL. Always good to see our friend Hugh Eizenstat. Would you like to make a statement?

Mr. EIZENSTAT. Just one point. It is mentioned by both but it cannot be overemphasized, it is a very unusual situation because well before any appropriation, citizens voted themselves a tax and they collected that tax. Over $5 million in tax revenue has been collected for a project that has yet to see the light of day, and it is because of the importance to the city that they went ahead and did this and didn't wait for the Federal Government to come forward and they were willing to tax themselves for it.

This has now been some five or six years since that has been done. I know you understand and that is why I know you have been so supportive.

Mr. BEVILL. That is a very good point to make. It is impressive any time people would vote taxes on themselves to pay for it. That means they are very supportive. We had hoped to be able to get the project under way in 1978, and there has been no start in five or six years. Now I notice this is one of the 19 new starts the Administration has recommended.

Mr. HAZAMA. Right.

Mr. BEVILL. I know this subcommittee is very interested in it and we hope to be able to work with Jim and Tim and get this under way here.

Mr. HAZAMA. Thank you very much.

Mr. SOLINGER. We appreciate that, Mr. Chairman.

Mr. BEVILL. Thank you.

MONDAY, APRIL 14, 1986.

DELAWARE RIVER CHANNEL & PORTS

WITNESSES

CAPTAIN PAUL LANE IVES, JR., CHAIRMAN, JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT AND DEVELOPMENT OF THE PHILADELPHIA PORT AREA

CAPTAIN JAMES WALLACE, VICE CHAIRMAN, JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT AND DEVELOMENT OF THE PHILADELPHIA PORT AREA

WILLIAM A. HARRISON, SECRETARY TREASURER, JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT AND DEVELOPMENT OF THE PHILADELPHIA PORT AREA AND EXECUTIVE DIRECTOR, PORTS OF PHILADELPHIA MARITIME EXCHANGE

LEWIS CACCESE, P.E., CONSULTANT, JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT AND DEVELOPMENT OF THE PHILADELPHIA PORT AREA

JAMES R. KELLY, PRESIDENT, DELAWARE RIVER PORT AUTHORITY

CAPTAIN SAMUEL M. SCHELLENGER, CHAIRMAN, MARINERS' ADVISORY COMMITTEE

ROB WONDERLING, MANAGER, THE PENJERDEL COUNCIL

MARVIN ROBINSON, COMMISSIONER, PENNSYLVANIA NAVIGATION COMMISSION

JOHN HAINES, DIRECTOR OF GOVERNMENTAL AFFAIRS, PHILADELPHIA PORT CORPORATION

CAPTAIN JACK SPARKS, PRESIDENT, PILOTS' ASSOCIATION FOR THE BAY AND RIVER DELAWARE

RICHARD COFFEY, DIRECTOR OF MARKETING, PORT OF WILMINGTON

ROBERT L. PETTEGREW, EXECUTIVE DIRECTOR, SOUTH JERSEY PORT CORPORATION

Mr. BEVILL. Next we have Mr. Paul Ives and Mr. Robert Pettegrew and group.

Mr. IVES. Nice to see you again, Mr. Chairman.

Mr. BEVILL. Glad to have you back with us. You may just each submit your prepared statements, and then proceed as you wish.

Mr. IVES. We have submitted our statements and we are really going to take very little of your time, but I would like to take some of the time available just to introduce my group. We have quite a delegation from the three states that constitute the major ports on the Delaware River.

On my right is Mr. James Kelly, President of the Delaware River Port Authority; Robert Pettegrew, Executive Director of the South Jersey Port Corporation; and Mr. Coffey, with the Port of Wilmington, Delaware.

Mr. Pettegrew has appeared as a witness in his own right but we are combining our time and we will take a few minutes of the time and he will take a few minutes and speed things up.

We also have with us, Captain James Wallace, Vice Chairman of the Joint Executive Committee.

Mr. BEVILL. Where is he?

Mr. IVES. Sorry, I guess he didn't make it. He came down with us.

Mr. BEVILL. You may want us to put the names in the record.

Mr. IVES. Yes, and Mr. William A. Harrison, Secretary Treasurer of the Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area and Executive Director of the Ports of Philadelphia Maritime Exchange; and Mr. Lewis Caccese, Professional Engineer and Consultant.

Captain Sam Schellenger, Chairman of the Mariners Advisory Committee in Philadelphia. Mr. Rob Wonderling, Manager of the Penjerdel Council, will submit a separate statement. He has declined to testify at this time, but he is with our group. He will testify in writing.

Mr. BEVILL. Very good.

Mr. IVES. Mr. Marvin Robinson, Commissioner of the Pennsylvania Navigation Commission. He didn't make it. They must be lost in the halls.

And last but not least, Captain Jack Sparks, President of the Pilots' Association.

Mr. BEVILL. We are glad to have each of you with us.

Mr. IVES. I will just use a moment of your time, Mr. Chairman, to remind you that we have come down here many times in the past and you have been very generous in our maintenance program on the Delaware River and it has really shown some good results. We went from 1.5 million tons of coal last year to 5 million tons of coal, a rather dramatic increase, largely due to the fact that our 40 foot ship channel was adequately maintained for one of the first times in many years.

The three states, Delaware, Pennsylvania and New Jersey, have three of the largest ports—Camden, Gloucester, Morrisville, Pennsylvania, Philadelphia and Wilmington.

They collectively handled 54 million tons of international cargo last year, and 30 million tons of domestic cargo. That was an increase of 10 percent. So it looks like the economy in our local area is doing well.

We channeled better than a billion dollars back into the tri-state region due to the port activities. We also as I said exported 5 million tons of coal and an additional 5 million tons of automobiles and steel and products of that sort, which we feel contributed favorably to the balance of trade of the United States.

So the impact of the channel dredging and keeping the Philadelphia, New Jersey, and Wilmington, Delaware ports open is we feel a very positive thing, not only for the local area but for the national economy. There was $350 million dollars returned in Custom receipts to the Federal Government which was nearly a ten to 1 return on the dollar that the government invested in dredging.

We think this is a good investment for the Federal Government.

Mr. BEVILL. I wish we could do that on all these projects.

Mr. IVES. I would like to have a piece of that business myself.

So I really need only say that we support the President's budget which the Corps of Army Engineers has assured us will be adequate to maintain our channels. We are not asking for anything in addition. We would like to keep the maintenance funding so that we can stay in business.

I would like to turn the chair over to Mr. Pettegrew for just a few minutes.

[The statement of Mr. Ives follows:]

JOINT EXECUTIVE COMMITTEE
FOR THE
IMPROVEMENT and DEVELOPMENT of the PHILADELPHIA PORT AREA
ORGANIZED OCTOBER 17, 1888

913 LAFAYETTE BUILDING
PHILADELPHIA, PA 19106
(215) 925-1522

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ROGER A. LARKIN, Vice-Chairman
WILLIAM A. HARRISON, Secretary-Treasurer
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DEASEY, SCANLON & BENDER, LTD., Counsel
Consulting Organization: MARINERS' ADVISORY COMMITTEE

Honorary Chairmen:
H. WILLIS JACKSON
HARRY G. SCHAD

Testimony of Paul Lane Ives, Jr., Chairman of the Joint Executive Committee for the Improvement And Development of the Philadelphia Port Area Conveying Request for Civil Functions Appropriations for the U.S. Army Coprs of Engineers' Philadelphia District, for Fiscal Year 1987. Presented April 14, 1986 Before the United States House of Representatives Energy & Water Development Subcommittee on Appropriations, Room 2362, Rayburn House Office Building, Washington, D.C.

MEMBERS

City Business Club of Philadelphia
Commercial Exchange of Philadelphia
Delaware County Chamber of Commerce
Division of Port Operations, City of Philadelphia
Greater Philadelphia Chamber of Commerce
International Longshoremen's Association
Northeast Philadelphia Chamber of Commerce
PENJERDEL Council
Philadelphia Board of Realtors
Philadelphia Freight Brokers, Fowarders & Customs Brokers Association
Philadelphia Marine Trade Association
Philadelphia Port Corporation
Pilots' Association for the Bay & River Delaware
Port of Wilmington
Port of Wilmington Maritime Society
Ports of Philadelphia Marine Terminal Association
Ports of Philadelphia Maritime Exchange
Ports of Philadelphia Maritime Society
South Jersey Port Corporation
Traffic Club of Philadelphia
Vessel Owners' & Captains' Association
Womens International Trade Association
World Trade Association of Philadelphia, Inc.
World Trade Div., Delaware River Port Authority

IDENTIFYING REMARKS

The Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area is port-affairs spokesman for twenty-four Delaware Valley civic and trade associations whose names appear at the bottom of this letterhead page. Organized in 1888, this Committee has participated in and promoted all major navigation improvements to the Delaware and Schuylkill Rivers and to the Chesapeake and Delaware Canal. The Members pay no dues beyond the nominal amounts needed to cover the Organization's administrative expenses, and the Officers serve without compensation.

Our Delaware River Ports -- Camden, Gloucester, Morrisville, Philadelphia and Wilmington -- identified collectively as the Ports of Philadelphia, handled 63.4 million tons of international cargo during calendar year 1985. This commerce generated more than a billion dollars into the economy of the tri-state Delaware Valley region. In addition to our international trade, the Ports of Philadelphia handled approximately 30 million tons of domestic cargo. International cargo through the Ports of Philadelphia increased by 10% during the calendar year 1985. Contributing to this increase was the fact that improvement in channel conditions through adequate channel maintenance has resulted in the dramatic growth of coal exports from 1.2 million tons in 1984 to over 5 million tons in 1985. This together with the export of over 5 million tons of automobiles, chemicals, machinery and steel products serves as a major contribution to the trade balance of the United States. We are hopeful that good channel maintenance will permit this continued upward trend.

Seven major oil refineries; the largest refinery complex on the east coast, plus one of the nation's largest steel mills are located along the Delaware River. In addition to the support these facilities lend to the economy and to national defense, the Philadelphia Naval Base is strategically located at the confluence of the Delaware and Schuylkill Rivers. In 1985, the Ports of Philadelphia produced $358 million for the Federal Government in Customs Receipts. The above reasons require us to solicit your support for our important and necessary navigation projects.

SUMMARY

The Joint Executive Committee recognizes the need for fiscal restraint. We also have been assured by the Corps of Engineers that the funds contained in the Administration's Budget will provide adequate maintenance of our federal navigation projects. With this in mind we support the President's FY '87 Budget as it relates to our navigation projects and solicit no increases beyond the minor amount proposed for Schuylkill River study funding.

FULL TESTIMONY

NEW CONSTRUCTION

Delaware River In The Vicinity of Camden

Funds in the amount of $2,650,000 are provided in the President's Fiscal Year '87 Budget for construction of the long-pending 37-foot authorized approach channel to Beckett Street Terminal, Camden, New Jersey. The terminal itself has undergone improvements costing $40 million; a portion of which was in anticipation of the completion of the 37-foot approach channel. The project was adopted in 1918 and a recent re-study by the Corps confirms a favorable benefit/cost ratio of 4.5 to 1. Pre-construction planning and engineering have been completed and we are informed that the Corps could move on this vital project once construction funds are allocated.

Camden is one of the most depressed areas in the Country. Job opportunities are practically non-existent with the exception that the Port continues to offer hope for change. The deepdraft vessels which this terminal can accommodate are denied full access to these facilities until the 37-foot project is realized. Local interests have acknowledged to the Corps of Engineers that they will comply with the requirements imposed by the Executive Branch of government and will meet all conditions of local cooperation to include required cost contributions which will exceed $1,000,000. This cooperation signifies the importance of this project to the local economy and illustrates why the budgeted appropriation of $2,650,000 of new construction funds is deserving of favorable action.

OPERATIONS AND MAINTENANCE

The proposed FY '87 Budget provides the U.S. Army Corps of Engineers with the following amounts for the operation and maintenance of the major authorized navigation projects in our area of interest:

Delaware River, Philadelphia to the Sea	$20,146,000
Delaware River, Philadelphia to Trenton	4,660,000
Schuylkill River	3,227,000
Wilmington Harbor	9,794,000
Chesapeake & Delaware Canal	21,096,000
Salem River, New Jersey	718,000
Total	$59,641,000

Delaware River - Philadelphia to the Sea and Philadelphia to Trenton

Adequate maintenance of our 40-foot channel is of utmost importance to the Ports of Philadelphia. The navigable channel from Trenton to the sea is 120 miles long and it makes it possible for the economies inherent in waterborne commerce to be brought to the doorsteps of one of the largest urban areas of the United States. This conduit of commerce provides over 90,000 much needed jobs to the area, over a billion dollars in business revenue and $50 million dollars in local tax revenues. It is only through adequate channel maintenance, which is dependent on adequate funding, that our regional economy will continue to prosper. In view of this we support the appropriation of $24,806,000 for the combined Delaware River - Philadelphia to the Sea and Philadelphia to Trenton projects.

Schuylkill River

The $3,227,000 in the President's Budget is considered adequate to maintain the navigable portions of the Schuylkill River at authorized depths. This will continue to provide access for vessels moving petroleum products to Chevron and Atlantic - two of the areas major refineries as well as to Swann Oil Terminal; for the delivery of gypsum rock to a major manufacturing plant located on the River; and will allow for the continued export of grain from the Tidewater grain elevator.

Chesapeake and Delaware Canal

The Chesapeake and Delaware Canal continues to be a vital link between the Ports of Baltimore and Philadelphia. This canal which is the busiest man-made sea-level canal in the United States continues to carry an ever increasing tonnage of general cargo. Commerce through this canal now has reached 17 million tons per year. Cargo is carried in ocean-going vessels with drafts up to 31 feet. We are assured that the $21,096,000 in the President's Budget will provide for adequate channel maintenance and operations and will include a non-recurring expense for redecking the Summit Bridge. The Joint Executive Committee supports this budget line item.

Salem River

Local interests at Salem, New Jersey, have made considerable expenditures in recent years towards developing a port facility to better serve the farmers of South Jersey in the export of their products. The $718,000 provided in the President's Budget will provide a proper channel between Salem and the Delaware River. This will provide the South Jersey farmers with the advantage of low cost waterborne commerce to better market their products; both nationally and internationally. The Joint Executive Committee supports this proposal in the interest of farming and an improved export posture.

Wilmington Harbor

The Port of Wilmington is a substantial economic asset to the City of Wilmington, the State of Delaware and the surrounding region. The Port's activities provide an estimated 1,000 jobs for area citizens and account for over $100 million in revenue impacts. The Port of Wilmington represents an investment of over $50 million in both public and private funds with $20 million planned for future expansion. Annual revenues in 1985 were $11.5 million; an increase of 18.6% over 1984. A new multi-purpose crane, capable of handling containers, bulk commodities and steel will soon come on stream; complementing an existing crane presently on site.

The budgeted amount of $9,794,000 will enable the Port of Wilmington to continue its dynamic progress; assuring additional economic growth to the region and the nation.

NAVIGATION STUDIES

Delaware River Comprehensive Navigation Study

Of particular import to local interests is the need to continue with the authorized study entitled Delaware River Comprehensive Navigation Study. This study will identify those channel improvements which are necessary to continue to maintain the Ports of Philadelphia as a viable asset. We urge your support of the $850,000 contained in the President's Budget in order to continue progress on this study.

Schuylkill River, Mouth to Penrose Avenue

The on-going interim or "fast track" study has analyzed navigation problems at the lower Schuylkill River associated with deepening the channel in order that it be consistent with the 40-foot Delaware River ship channel. Preliminary findings support deepening the project from 33 feet to 40 feet from the mouth of the Schuylkill River to the Penrose Avenue Bridge in order to maximize the waterborne capabilities of the Tidewater Grain Terminal and the adjacent Chevron oil terminal. Continuation of planning and engineering is warranted and we urge that $100,000 be added to the President's FY '87 Budget so as to expedite movement toward construction of this economically beneficial activity.

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Ports of Philadelphia Witness List, United States House of Representatives Energy and Water Development Subcommittee on Appropriations Hearing, April 14, 1986, Room 2362 Rayburn House Office Building, Washington, D.C.

Captain Paul Lane Ives, Jr., Chairman, Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area

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Captain Jack Sparks, President, Pilots' Association For The Bay and River Delaware

Mr. Richard Coffey, Director of Marketing, Port of Wilmington

Mr. Robert L. Pettegrew, Executive Director, South Jersey Port Corporation

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Traffic Club of Philadelphia
Vessel Owners' & Captains' Association
Womens International Trade Association
World Trade Association of Philadelphia, Inc.
World Trade Div., Delaware River Port Authority

Mr. PETTEGREW. Thank you, Mr. Chairman.

I have a very short statement.

I am Robert L. Pettegrew, Executive Director of the South Jersey Port Corporation of Camden, New Jersey, an agency of the State of New Jersey. I am here today to testify in support of the Corps of Engineers' proposal to dredge a 37-foot deep approach channel to our Beckett Street Terminal in Camden.

In recent years, our corporation has invested over $40 million to make our port terminals as modern and efficient as any break bulk and dry bulk cargo facilities to be found on the East Coast. Our investment has been particularly important to our region because Camden, as you know, is one of the most economically depressed urban areas of our country.

Because of this, our marine terminal facilities make a major economic contribution to the area in that we generate over $30 million in Port direct related revenue and over 500 full-time jobs in the region.

Unfortunately, our investment to date cannot be fully utilized because of the limitations on shipping activities caused by the present inadequate 30-foot deep vessel approach to our Beckett Street Terminal. This limitation has been long recognized and the planned deepening to the 37-foot level has been authorized since 1919; unfortunately the work has yet to be done.

We are very encouraged that the Corps feels that moving ahead with this project at this time is the appropriate thing to do. The Corps' fiscal year 1987 budget request of $2,630,000, along with the local contribution by the State of New Jersey through the South Jersey Port Corporation, will make this $4.5 million dredging project a reality.

During this past year, we handled over 1.8 million tons of cargo through our Beckett Street Terminal, one of the few ports that had equal balance almost between imports and exports. Once the 37-foot dredging project is completed, we believe that our business will increase by 25 percent to approximately 2.25 tons. If these projections hold true, and we are confident they will, we anticipate that upward of 100 jobs will be created because of port activities.

In order to prevent any delay in the implementation of this project, the South Jersey Port Corporation has already entered into a cost sharing agreement with the Corps of Engineers. Mr. Chairman, as you can see, we are prepared, along with the Corps, to start this important Delaware River project, in Camden, New Jersey, as soon as possible. We hope the Congress will appropriate the $2,630,000 requested by the Corps for the Beckett Street Terminal project.

For the record, I would like to provide for the committee's information a cost breakdown of the project showing the Federal Government's share versus the South Jersey Port Corporation's contribution. In addition, I am also submitting for the record a copy of our letter of agreement with the Corps of Engineers and a small drawing which clearly illustrates why this project is vitally needed to permit deep draft vessels in service today to serve our port.

Thank you for affording me this opportunity to testify, and I would be happy to respond to any of your questions on this project.

Thank you.

[The statement of Mr. Pettegrew follows:]

STATEMENT BY ROBERT L. PETTEGREW, EXECUTIVE DIRECTOR
SOUTH JERSEY PORT CORPORATION
ON BEHALF OF APPROPRIATIONS IN FISCAL YEAR 1987
FOR CONSTRUCTION OF A DEEPENING OF CHANNEL ACCESS IN CAMDEN, N.J.
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
OF THE HOUSE COMMITTEE ON APPROPRIATIONS
CONGRESS OF THE UNITED STATES
WASHINGTON, D.C.
APRIL 14, 1986

Supported by:

City of Camden, NJ
County of Camden, NJ
Delaware River Port Authority
International Federation of Professional & Technical Engineers, (AFL-CIO), Local 18
International Longshoremens' Association, Locals 1291, 1242 & 1242-1
International Union of Operating Engineers, Local 25, Marine Division
Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area
New Jersey Department of Commerce & Economic Development
New Jersey Maritime Advisory Committee
New Jersey State Chamber of Commerce
New Jersey World Trade Council
Philadelphia Maritime Exchange
South Jersey Chamber of Commerce
Southern New Jersey Development Council
The Penjerdel Council

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Thank you for affording me this opportunity to testify, and I would be happy to respond to any of your questions on this project.

DELAWARE RIVER PROJECT AT CAMDEN, NEW JERSEY

Description

-- The initial authorization for the project was adopted in 1919, amended in 1945, and remains extant.

-- The initial authorization provided for three segments of the channel to be dredged to 18 feet, 30 feet, and 37 feet. Both the 18 feet and 30 feet segments have been completed.

-- The cost of the project is approximately $4.5 million.

-- The project would deepen an area offshore of the Beckett Street terminal in Camden from 30 feet to a depth of 37 feet.

-- Approximately $10-12 million of non-Federal funds have been spent to construct a 40-foot berth in reliance on the authorization. (This is in addition to the $30 million already invested by the State of New Jersey through the South Jersey Port Corporation, to construct the Beckett Street terminal.

-- In October, 1985, the South Jersey Port Corporation agreed in writing to provide the appropriate funds to satisfy the level of non-federal cost-sharing adopted by Congress for new construction.

-- The project was included in the Army Corps of Engineers FY 87 Budget.

Budget Breakdown

Total Project Cost:

Corps of Engineers Budget Request	$2,630,000
South Jersey Port Assessment	$1,343,250
South Jersey Port land costs, easements, rights-of-way, relocations, and disposal costs	$ 236,000
Additional South Jersey Port 10%	$ 443,000
Total Project Cost	$4,652,250

3/26/86

State of New Jersey
SOUTH JERSEY PORT CORPORATION

ROBERT L. PETTEGREW
Executive Director

BROADWAY & MORGAN BLVD.
CAMDEN, N. J. 08104
609-541-6500

October 16, 1985

LTC Ralph V. Locurcio, USA
District Engineer
U. S. Army Corps of Engineers
Custom House, 2nd & Chestnut Sts.
Philadelphia, PA 19106

Dear Colonel Locurcio:

Reference is made to your letter of August 2, 1985, and to our discussions regarding construction of the Delaware River in the Vicinity of Camden, New Jersey project held on August 19, 1985. This letter constitutes an expression of intent by the South Jersey Port Corporation to cooperate with the Federal Government in initiating construction of this project in Government Fiscal year 1987.

To facilitate construction of the project, the South Jersey Port Corporation will provide assurances to provide and maintain, when and as needed, such depth from the Federal channel line to and between the wharves at the Beckett Street terminal as may be required for the accommodation of vessels at the terminal as required in House Document No. 353, 77th Congress, 1st Session. As specified in my July 11, 1983 letter, the South Jersey Port Corporation will also:

a. Hold and save the United States free from damages due to the construction work, except for damages due to the fault or negligence of the United States or its contractor;

b. Comply with applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P. L. 91-646) and implementing regulations; and

c. Comply with Title VI of the Civil Rights Act of 1964 (P. L. 88-352).

In addition, the South Jersey Port Corporation agrees at this time to provide without cost to the United States all lands, easements, rights-of-way, and relocations necessary for the construction, and subsequent operation and maintenance of the project including suitable areas, determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, or the costs thereof, and necessary retaining dikes, bulkheads, and embankments therefor, or the costs of such retaining works. We also agree to provide such funds as are necessary to meet the non-Federal requirements for construction during the term of construction that currently, for commercial navigation with incremental depths of 20'-45', is determined to be 25% with an additional 10% of construction costs to be amortized over a 30-year period following construction.

It is understood that the total project cost is currently estimated to be $4,415,000 which is exclusive of lands, easements, rights-of-way and disposal area costs and includes allowances for inflation through the construction period. The South Jersey Port Corporation will be responsible for $1,455,000, which includes 25% of the construction cost of $4,415,000, plus $350,000 for lands, easements, rights-of-way, relocations and disposal area costs. Additionally, the South Jersey Port Corporation will repay $442,000 (10% of the construction costs) upon completion of the construction and has the option to do so over a 30-year period at 1/8% over the prevailing market interest rate.

It is understood that the provision of the items of local cooperation is a non-Federal responsibility and that South Jersey Port Corporation will bear the full costs thereof, regardless of any cost-sharing percentages specified above. These items of local cooperation are:

a. Provide and maintain when and as needed such depth from the Federal channel line to and between the wharves at Beckett Street terminal as may be required for the accommodation of vessels at the terminal;

b. Hold and save the United States free from damages due to the construction work, except for damages due to the fault or negligence of the United States or its contractor;

c. Provide without cost to the United States all lands, easements, rights-of-way, and relocations necessary for the construction, and subsequent operation and maintenance of the project including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, or the costs thereof, and necessary retaining dikes, bulkheads, and embankments therefor, or the costs of such retaining works.

d. Comply with Title VI of the Civil Rights Act of 1964 (P. L. 88-352).

It is also understood that operation and maintenance of the project will be a Federal responsibility.

The project to be constructed is that generally described in the General Design Memorandum and Environmental Assessment dated October 1983. Attached, as Exhibit A, is a schedule of non-Federal expenditures for the cash contribution portion of the non-Federal requirement through the estimated 6-month construction period. The schedule is based on the $4,765,000 estimate of total project costs. It is further understood that the estimates of costs are preliminary and that final costs will depend on the actual costs of construction.

The South Jersey Port Corporation is the agency empowered by law to provide the non-Federal cooperation required for the Delaware River in the Vicinity of Camden, New Jersey project and, prior to construction, will enter into a binding written agreement with appropriate representatives of the Corps of Engineers which addresses project construction and satisfies the requirements of Section 221 of Public Law 91-611. Attached as Exhibit B is an assessment of the South Jersey Port Corporation's ability to pay the non-Federal portion of costs for the project.

It is further understood that if this letter of assurance is acceptable to the Assistant Secretary of the Army for Civil Works, he will recommend to the Office of Management and Budget that an appropriate request for funds to support the Delaware River in the Vicinity of Camden, New Jersey construction be included in the President's budget for Fiscal year 1987. As previously recognized, if legislation is enacted which changes cost sharing and financing for this project, such cost sharing and financing provisions will supersede this financial agreement.

Sincerely,

Robert L. Pettegrew

Robert L. Pettegrew

RLP:kvb
Encs.

SOUTH JERSEY PORT CORPORATION

EXHIBIT B

DELAWARE RIVER IN THE VICINITY OF CAMDEN, NEW JERSEY
FEDERAL NAVIGATION PROJECT (37 FT.)
ASSESSMENT OF ABILITY TO PAY
SUMMARY

The South Jersey Port Corporation (SJPC) is a duly empowered agency of the State of New Jersey, Department of Commerce and Economic Development. As such, the Corporation, as a legally constituted, public body, has the full authority and capability to perform the terms of the local cooperation agreement; SJPC has the ability to make the required cash contributions during construction and repay the remaining share of non-Federal costs over time.

It is anticipated that SJPC would use proceeds from its general borrowing capabilities for its cost share. The debt would be refunded by the revenues derived from the commercial traffic making use of the SJPC land-side facilities.

SOUTH JERSEY PORT CORPORATION

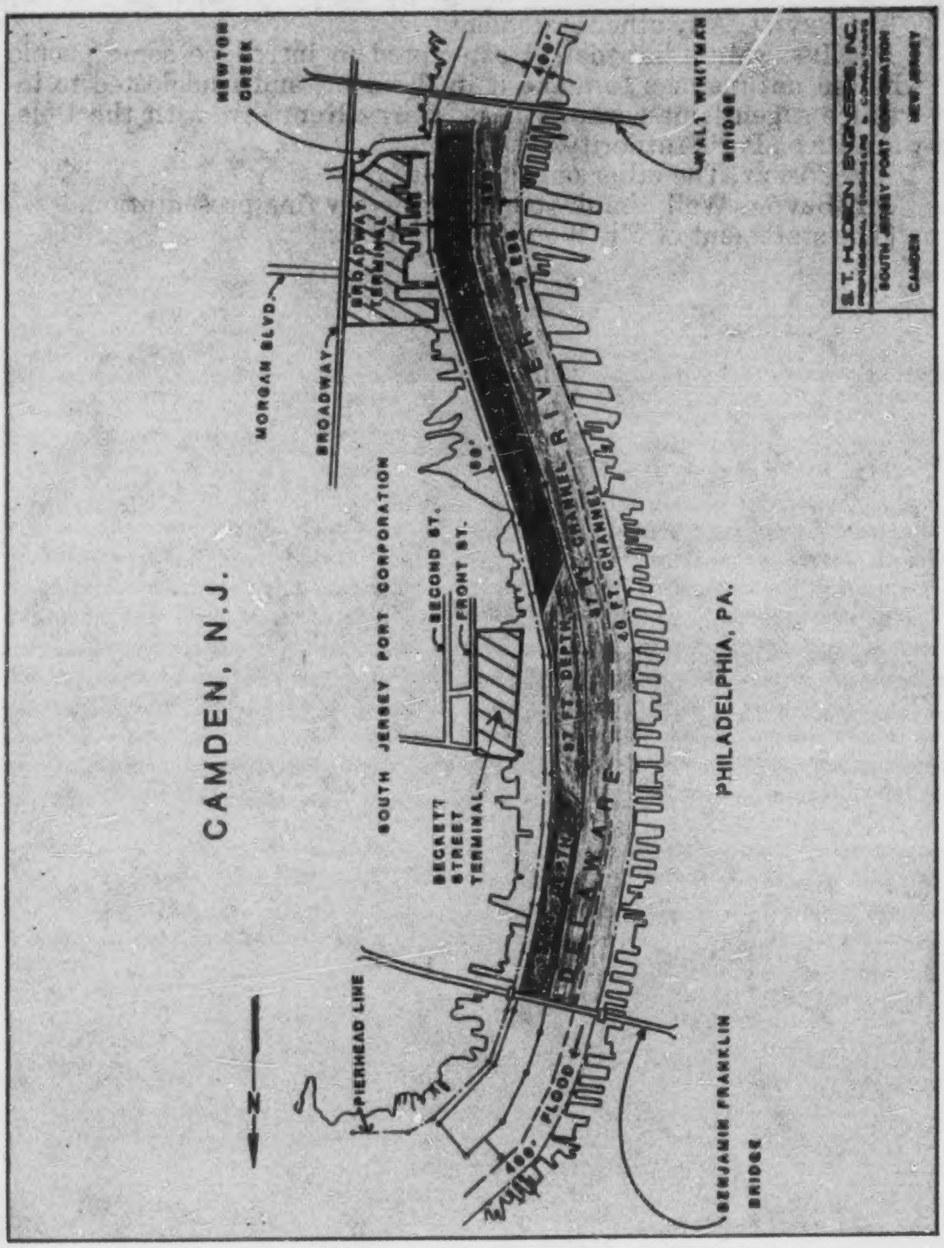
EXHIBIT A
DELAWARE RIVER IN THE VICINITY OF CAMDEN, NEW JERSEY
SCHEDULE OF NON-FEDERAL EXPENDITURES

Total Non-Federal First Costs Payable During Construction Period: $1,455,000*

Construction Year	Construction Cost	Non-Federal First Cost
1	$ 4,765,000	$ 1,455,000
Total	$ 4,765,000	$ 1,455,000

* Includes:	$ 235,000	disposal area preparation
	115,000	LERR (lands, easements, rights-of-way)
	1,105,000	25% of $4,415,000 estimated construction cost
	$1,455,000	-non-Federal first costs

Additional, non-Federal costs payable upon completion of construction: 10% x $4,415,000 = $442,000. This amount may be repaid over a 30 year period at 1/8% over the prevailing market interest rate.


CAMDEN, N.J.
SOUTH JERSEY PORT CORPORATION
PHILADELPHIA, PA.
NEWTON CREEK
MORGAN BLVD.
BROADWAY
BROADWAY TERMINAL
SECOND ST.
FRONT ST.
BECKETT STREET TERMINAL
PIERHEAD LINE
N
WALT WHITMAN BRIDGE
BENJAMIN FRANKLIN BRIDGE
DELAWARE RIVER
37 FT. DEPTH
37 FT. CHANNEL
40 FT. CHANNEL
FLOOD
EBB
400'
500'
60'
S. T. HUDSON ENGINEERS, INC.
PROFESSIONAL ENGINEERS & CONSULTANTS
SOUTH JERSEY PORT CORPORATION
CAMDEN
NEW JERSEY

Mr. **Bevill.** Any other statements?

Mr. **Ives.** Mr. Chairman, I attempted to introduce some people who did not manage to make it in the door, and I neglected to introduce a gentleman who is here: Harry Kennedy, with the Delaware River Port Authority.

Mr. **Coffey.** The other ones made it now.

Mr. **Bevill.** Well, thank you all for a very fine presentation.

[The statement of Mr. Wonderling follows:]

THE PENJERDEL COUNCIL

Honorable Tom Bevill, Chairman
Subcommittee on Energy & Water Development
House of Representatives
Washington, DC 20515

TESTIMONY OF ROBERT C. WONDERLING, REGIONAL AFFAIRS MANAGER, THE PENJERDEL COUNCIL, CONVEYING REQUESTS FOR CIVIL FUNCTIONS APPROPRIATIONS FOR THE U.S. ARMY CORPS OF ENGINEERS, PHILADELPHIA DISTRICT, FOR FISCAL YEAR 1987. PRESENTED APRIL 14, 1986 BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS.

3:10 p.m.

April 14, 1986

ROOM 2362

RAYBURN HOUSE OFFICE BUILDING

WASHINGTON,DC

Introduction and Summary

FY 87 Funding of Navigation Projects of Interest to the Ports of Philadelphia

Good afternoon, my name is Robert Wonderling, Regional Affairs Manager for the PENJERDEL Council. The PENJERDEL Council is a tri-state association of commerce, industry, and the professions with membership throughout the Delaware Valley region.

The Council is concerned with the economic well-being of the PENJERDEL region, which includes 11 counties in segments of Pennsylvania, New Jersey, and Delaware. Of primary concern to the Council is the economic vitality of our ports. We continually advocate on behalf of this regional and national asset so that our ports will expand and serve the Delaware Valley and the entire United States.

Collectively, the Ports of Philadelphia handled 63.4 million tons of international cargo in 1985 -- This was an increase of 10% over 1984, and can be attributed to the improved channel conditions in the Delaware River. Continued, improved channel maintenance has enabled the Ports of Philadelphia to increase coal exports by 3.8 million tons in 1985. Over 5 million tons of autos, machinery, steel products, and other American goods have been exported via the Ports of Philadelphia in 1985.

The adequate channel depths have had a direct impact on customs receipts and our region's contribution to the economic health of the federal government.

In terms of national defense, the Philadelphia Naval Base and Shipyard rely on current channel conditions for access of our nation's fleet. Most recently, the U.S.S. Kittyhawk (SV-63) moved up our channel for an extensive 2-year overhaul and maintenance program, which will provide numerous ancilliary economic benefilts for the region.

The billions of dollars that are invested into the three-state waterfront rely on adequate channel depths. It is our understanding that there are sufficient funds contained in the Administration's FY 87 Budget for the Army Corps of Engineers to maintain current channel levels. Such assurances generate increased investment, contribute to the U.S. balance of trade through increased exports, and increase customs receipts for the Federal Treasury.

The PENJERDEL Council wholeheartedly supports the President's FY 87 budget as it relates to the navigation projects in the region.

Camden Waterfront

In conclusion, we point out that although we do not seek additional funding, we do urge action on the new construction project in the vicinity of Beckett Street Terminal, Camden, New Jersey.

Funds in the amount of $2,650,000 are provided in the Administration's FY 87 budget for an authorized deepening of the channel near Beckett Street to 37 feet. The South Jersey Port Corporation has already made a considerable investment in the project and it is imperative that it move forward.

On behalf of the PENJERDEL Council, we appreciate the opportunity to be heard and to present our views to the distinguished members of this committee.

Thank you.

Full Testimony

New Construction

Camden Waterfront

The project was adopted in 1910 and modified in 1930 and 1945. The President's FY 87 Budget allocates $2,650,000 for construction of an authorized 37-foot approach channel to Beckett Street Terminal, Camden, New Jersey. The Army Corps of Engineers has determined a benefit-cost ratio of 4.5 to 1 for the 37-foot approach channel.

The South Jersey Port Corporation and the state of New Jersey have invested $30 million in the Beckett Street Terminal. An additional $10 - $12 million of federal funds have been spent to construct a 40-foot berthing area. Pre-constrution planning and engineering are complete, and bids can be made for this project as soon as construction money is made available.

Currently, deepdraft vessels, which Beckett Street can accommodate, are denied access due to the inadequate depth of the approach channel. The 37-foot channel deepening will improve the capability of the Camden Port and enhance the area's dwindling economy through the expansion of operations and the creation of new jobs.

Local interests have agreed to comply with the Administration's requirements regarding cost-sharing. All conditions of local cooperation including required cost contributions that will exceed $1,000,000 will be met.

Such commitments and cooperation signify the importance of this project and the need that the appropriation of the $2,650,000 receive favorable action.

Operations and Maintenance

The proposed FY 87 Budget provides the U. S. Army Corps of Engineers with the following amounts for the operation and maintenance of the major authorized navigation projects in our area of interest:

Delaware River, Philadelphia to the Sea	$20,146,000
Delaware River, Philadelphia to Trenton	4,660,000
Schuylkill River	3,227,000
Wilmington Harbor	9,794,000
Chesapeake and Delaware Canal	21,096,000
Salem River, New Jersey	718,000
Total	$59,641,000

Delaware River -- Philadelphia to the Sea and Philadelphia to Trenton

We support the $24,806,000 appropriation for the combined Delaware River -- Philadelphia to the Sea and Philadelphia to Trenton projects.

The channel from Trenton to the sea is 120 miles long. The waterborne commerce generated along that channel provides over 90,000 jobs for the region, over $1 billion in business revenues, and $50 million dollars in local tax revenues.

Adequate funding will guarantee adequate channel depths, ease and access of waterborne commerce, and continued economic prosperity.

Schuylkill River

The $3,227,000 in the Administration's Budget is adequate to maintain navigable channels in the Schuylkill River.

Adequate channel depths allow for continued and increased grain exports from the Tidewater Grain Elevator, as well as provide access for vessels moving petroleum products to two major refineries.

Chesapeake and Delaware Canal

The $21,096,000 in the Administration's Budget is sufficient for the Army Corps of Engineers to provide adequate channel maintenance for this important link between the Ports of Philadelphia and Baltimore. The funds will insure a channel depth adequate to accommodate vessels with drafts up to 31 feet. Commerce through this canal amounts to 17 million tons per year and continued channel maintenance will insure growth of the busiest man-made sea-level canal in the United States.

Salem River

We endorse the President's FY 87 Budget Allocation of $718,000 for the channel between Salem, New Jersey and the Delaware River. Local interests have made considerable expenditures in recent years towards developing a port facility at Salem. An improved channel will enable the facility to export farm products from the Garden State both nationally and internationally.

Wilmington Harbor

The amount of $9,794,000 contained in the Administration's FY 87 Budget is adequate for the Port of Wilmington to maintain and expand operations.

The Port of Wilmington serves the city of Wilmington, the state of Delaware, and the entire PENJERDEL region. The activity of the Port provides an estimated 1,000 jobs and accounts for upward of $100 million in revenue for the state of Delaware.

Annual revenue increased in 1985 by 11.5 million, an increase of 18.6% over 1984. There has been considerable private and public investment in the facility with $20 million planned for future expansion. Appropriation of the budgeted amount will enable the Port of Wilmington to continue to expand and serve the Delaware Valley and the entire United States.

Navigation Studies

Delaware River Comprehensive Navigation Study

The PENJERDEL Council supports the $850,000 contained in the FY 87 Budget for continued study of navigation projects in the region. The comprehensive Navigation Study is an ongoing study that identifies those channel improvements that are necessary to maintain the Ports of Philadelphia as a viable, national economic asset.

Schuylkill River -- Mouth to Penrose Avenue

An ongoing interim study has analyzed navigation problems at the lower Schuylkill River associated with deepening the channel to a level that is consistent with the 40-foot Delaware River Channel.

Studies indicate that by deepening the channel from 33 feet to 40 feet from the mouth of the Schuylkill River to the Penrose Avenue Bridge, waterborne capabilities will be maximized. Specifically, the Tidewater Grain Terminal and the Chevron Oil Terminal would benefit from the deepened channel. In this context, we urge that $100,000 be added to the Administration's FY 87 Budget to expedite movement towards construction of this project.

MONDAY, APRIL 14, 1986.

DOE—AMORPHOUS SILICON

WITNESS

RICHARD L. WRIGHT, EXECUTIVE VICE PRESIDENT, CHRONAR CORPORATION

Mr. BEVILL. Next is Mr. Richard Wright, Executive Vice President of Chronar Corporation.

Pleased to have you with us, Mr. Wright. Your prepared statement will be made part of the record, and you may proceed as you wish.

Mr. WRIGHT. Thank you, Mr. Chairman. I will put my statement into the record and talk for just a moment about Chronar Corporation.

We are headquartered in Princeton, New Jersey, and in the last five years we have gone from 13 employees to about 300. We are in the business of producing amorphous silicon photovoltaic panels. Presently, we are the largest producer of amorphous photovoltaic panels in the country.

The technique by which we make these panels, just for your interest, is by putting very thin film on pieces of glass, and the glass itself makes the electricity.

The products that these panels are used for range from consumer products, such as battery chargers to pumps, telecommunication to utilities.

During the last few months, we have installed down in your home State of Alabama the largest amorphous silicon photovoltaic power station in the country. In fact, the Alabama Power Report just came out with our panels all over their cover. We are going to formally inaugurate this station later next month, as well as the generating station we are building in Alabama, in a joint venture with the Southern Company. We are building a manufacturing plant which will produce these panels.

Here, I am showing you a panel which is four feet by twelve inches in our plants today. We make them 12 inches by 12 inches, or 12 by 3 feet. I carry this around simply because it is convenient.

In terms of our business, we are presently under construction for two new plants, in China and in Yugoslavia, and have a factory in Wales, and going to open a plant in France next year. This is a business which in the last year has begun to become quite interesting from a commercial point of view.

Our present production cost is slightly less than $2 a watt, and we expect this cost to drop to 50 cents within the next several years.

At this point, we will begin to compete with all conventional forms of energy—nuclear, oil, coal, and the like.

During the past number of years, as you know, there has been a partnership between the Government and private industry for seed R&D, the kind of R&D that is very difficult for private companies to come up with. In our industry, it has been very important. We have in the past participated in this R&D, and would like to in the future.

It is important to understand what the Japanese as well as other foreign nations are doing in this area right now where they do not have the ability to produce indigenous energy we do in the country, from a public policy point of view. They are pouring literally hundreds of millions into this particular technology in order to have energy produced indigenously at home in the next decade.

It is important to understand that as well as the fact that the cost to produce these panels is now dropping to the point in this country where it is competitive in certain segments today, and we feel it will be competitive with all segments in just a few years. Therefore, we strongly recommend that the committee not cut the photovoltaic budget at all. In fact, we recommend the amorphous silicon portion of the budget be increased in several key areas. I have made these recommendations in the prepared testimony that I have given to you.

Finally, I think it is particularly important—during the time of falling oil prices, when people tend to be lulled to the idea that energy somehow will be cheap for years to come from this particular source—it is extremely important to focus on the fact that it is an industry that we have developed in this country. We have great possibilities to continue to grow, and feel that this committee should support increased R&D in amorphous silicon.

Thank you very much.

[The statement of Mr. Wright follows:]

CHRONAR

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES SUBCOMMITTEE
ON ENERGY AND WATER DEVELOPMENT

APRIL 14, 1986

Chairman Bevill and distinguished members of the committee. It is my pleasure to present testimony for the Chronar Corp. of Princeton, New Jersey. Chronar Corp. is the largest manufacturer of amorphous silicon photovoltaic panels in the United States. Chronar's amorphous silicon panels are manufactured on glass substrates using techniques produced by Chronar. The panels have a wide variety of uses from clocks and battery chargers to pumping, lighting and utility applications. We have manufacturing facilities in New York and New Jersey and another is under construction in Alabama in a joint venture with the Southern Company. Chronar is installing a 100 kilowatt amorphous silicon generating station near Birmingham for the Alabama Power Company. This is the largest station of its kind in this country. The Company has a number efforts underway overseas. Our factory in Wales opened last year; our French factory officially opens May 7, 1986; and our Yugoslavia and China factories are soon to be under construction. When these factories are completed Chronar will be the largest manufacturer of amorphous silicon photovoltaics in the world.

During this past year commercial amorphous silicon systems have penetrated a number of markets and now offer the promise of dramatically decreasing electricity prices in many of these markets in the near term. For example, our present direct manufacturing cost is less than $2 per peak watt. With ongoing government research and development support and intelligent marketing we expect our manufacturing costs to fall below $.50 per peak watt by 1990. At this cost, we will be able to install utility type systems at $2.50 per watt and we would be more closely competitive with conventional sources of energy (i.e. coal, nuclear, oil and gas).

In order to accomplish these cost reductions, Chronar sees a need for continued research and development program sponsored by the government. The DOE generic funding for state of the art research is particularly appropriate since such funding is not currently available in the private sector.

The highest priority should be to support and ensure the development of a stable 8Wp/ft2 single stack a-Si product. It is achievable by 1990, and it is a cost effective product for any photovoltaic application including domestic grid projects.

CHRONAR CORP., P.O. BOX 177
PRINCETON, NEW JERSEY 08540
609 587-8000 TELEX 843394

The main elements of this development effort should include:

a. improving large area manufactured average panel efficiency to 8 Wp/ft2.
b. stabilizing cell efficiency; specifically, the Staebler-Wronski degradation.
c. improving cell interconnect techniques.
d. optimizing encapsulation techniques.
e. developing flow-line processes.

Further research must also be pursued on multi-junction cells. Investigation should focus on:

a. Two-terminal devices (Si - Ge - Sn and other alloy of a-Si).
b. Three-terminal devices (e.g. a-Si and chalcogenides).
c. Four terminal devices (e.g. a-Si and crystal combinations.

In a world which is focusing more and more on amorphous silicon it is essential that the U.S. government renew and expand its commitment. The Japanese government's commitment to amorphous silicon is formidable and well documented. Other governments around the world have increased their involvement in all aspects of research and development in amorphous silicon materials. It is clear that the demonstrated cost reductions during the past few years have sparked a keen worldwide interest in amorphous silicon materials.

The photovoltaic revolution is especially important to developing countries, where the grid is not yet in place. To help export to these countries, the financial institutions should be encouraged to embrace and finance photovoltaic projects through organizations such as AID, OPIC, and World Bank.

Amorphous silicon photovoltaic development is at a stage when even a modicum of government help can make an enormous difference. This future energy source should be developed with our government's efforts, not in spite of it.

Therefore, Chronar strongly recommends that the overall photovoltaic budget be increased from its present level of $46.5 million. But more important, we feel strongly that single junction amorphous silicon thin film budget should be increased to $10 million. The multi junction amorphous silicon budget should be increased to $6 million. We also recommend that the thin film module reliability budget be increased to $3 million range. The table below gives a complete breakdown of our recommendations for 1987.

FY87
BUDGET RECOMMENDATIONS ($ MILLIONS)

1.	Single Junction Thin Films	
	a. a-Si	10
	b. High efficiency concepts	2
	c. Advanced thin films	3
	d. Deposition research	1
		$16
2.	Multi Junction Concepts	
	a. a-Si	6
	b. High efficiency	2
		$8
3.	Innovative Concepts	
	a. New idea	2.0
	b. University Program	3.0
	c. Thin Film encapsulation	2
	d. Institutional Issues	1
		$8
4.	Advanced Film Sheet	$1.0
5.	Flat Plate Collector	-0-
6.	Concentrator Collector	$3
7.	Module Reliability	4.0
8.	Systems experiments	4
9.	Technology Transfer	$1
10.	Capital Equipment	$2
	Total	$47

As the subcommittee knows, much progress has been made during the past few years in the cooperation between the U.S. government and the photovoltaic industry. It is essential that this partnership be continued. At a time when much public attention is focused on falling oil prices, electricity planners know that cheaper and alternative forms for producing the electricity must be developed and installed. It is our experience that an increasing number of utilities in this country are seriously considering the photovoltaic option. The appeal to the utilities is varied but a common theme of continually decreasing costs, incremental installations, and total safety with little or no environmental impact can not help but appeal to utility planners in the future. Perhaps just as important is the contribution photovoltaics can make around the world in pumping systems, lighting systems, desalinization and the like.

This year is a time of solid growth for the amorphous silicon photovoltaics industry. The promise of the past is turning into reality. We must continue to build towards the future. Chronar Corp. strongly supports increased funding in amorphous silicon photovoltaics programs.

Thank you.

Mr. BEVILL. You built this near Birmingham, I notice.

Mr. WRIGHT. That is right.

Mr. BEVILL. Is it in operation now?

Mr. WRIGHT. We started it up last week, but the official opening will take place in early June.

The Chairman of the Alabama Power Company, Mr. Farley, will undoubtedly send you an invitation to come.

The plant that we are building in conjunction with the Southern Company will also be near Birmingham. That plant should employ between 70 and 100 people starting early next year.

Mr. BEVILL. I certainly want to see the plant. I don't know if I can come on that particular occasion, but I certainly want to see it.

This is commendable, what your company has done. And thank you very much for your fine statement.

Mr. WRIGHT. It is a pleasure to appear.

Mr. BEVILL. Thank you.

MONDAY, APRIL 14, 1986.

RED AND ARKANSAS RIVER PROJECTS

WITNESSES

HARVEY BOLLINGER, EXECUTIVE DIRECTOR, REDARK DEVELOPMENT AUTHORITY

TOM PAYNE, BUSINESSMAN AND RANCHER, REPRESENTING POTEAU/DEEP FORK ASSOCIATION

WILLIAM C. CHAPMAN, VICE PRESIDENT (OKLAHOMA), RED RIVER VALLEY ASSOCIATION

BEVERLY RODGERS, MAYOR, HOLDENVILLE, OKLAHOMA, REPRESENTING EAST CENTRAL WATER ASSOCIATION

RON BOURBEAU, CITY MANAGER, SHAWNEE, OKLAHOMA, REPRESENTING EAST CENTRAL WATER ASSOCIATION

LEONARD BRILEY, CITY MANAGER, ADA, OKLAHOMA, AND CHAIRMAN, EAST CENTRAL WATER ASSOCIATION

Mr. BEVILL. We will recognize our colleague, Mr. Watkins, and you may proceed and handle it as you wish.

Mr. WATKINS. Thank you very much, Mr. Chairman.

Mr. BEVILL. You know, we think a lot of Wes here in the Congress, and I know you appreciate the good work he does here, and we appreciate it. He doesn't only work for Oklahoma but he works for the whole nation, as well.

Mr. WATKINS. As I said, Harvey is on his way in, and while he is I will reemphasize something, Mr. Chairman.

I appreciate your allowing me to say a few remarks prior to their testimony. I think it worked out so it will be very efficient and effective.

And to Mr. Myers and to the staff, I appreciate their listening to me.

Here he comes. We are starting early, though, so don't worry.

I might say, Mr. Chairman, I know you all have heard me speak and try to be as persuasive as I can—sometimes not as effective as I wish I could be—on Parker Lake and the need of it in the five-county area there. It was a great problem for me when Secretary

Dawson and some of the others said this didn't have any Federal interest; and I think they also said it was an Oklahoma City project.

We want to be helpful and cooperative with our big city cousins. Today, in front of you, we have a number of people who travelled, and many of them have come on their own dollar, and it is tough dollars in Oklahoma nowadays, very tough to have money to get up here. But these people are from a five-county area. They believe strongly enough in trying to get the Parker Reservoir that some individuals are coming and attending these hearings to tell their story.

Not only do we have five at the table, but we have a number of people in the back here. All of you please stand up, if you don't mind. There are others who will be here about 3:45. But, since we are 15 minutes early, we still appreciate your coming.

Mr. BEVILL. We are delighted to have each of you.

I am sure, as you always do, you will see to it that their names get into the record.

Mr. WATKINS. That is right. We will make sure every name from Oklahoma is in the record.

Harvey, we know you have prepared testimony. You know the particular system, and we will enter all of your testimonies, in full, as part of the record. Why don't you summarize it and just tell it from the heart why we are concerned about the Parker Reservoir.

Why don't you begin, and you can introduce each one of the people representing what county and town.

Mr. BOLLINGER. Thank you, Wes.

On behalf of the Board of Directors of the Development Authority, we want to express our appreciation to meet before this committee and talk about the needs of our area.

RedArk Development Authority is a public trust that is established under the laws of the State of Oklahoma for a 21-county area. The purpose of the Authority is to undertake the maximum potential development of the area's water and natural resources, with the objective of obtaining the maximum economic and employment benefits to the people of our area.

With this purpose in mind, we are vitally interested in and concerned about development of what we consider our most vital resource, the most vital resource of the nation, and that is water.

To achieve this principal purpose, RedArk has initiated a comprehensive water development program, and in our role as a planning and implementing authority we work closely with three citizen water associations: East Central Water Association, the Poteau/Deep Fork Association, and Red River Valley Association.

With me today are representatives from each of those three water associations. We have attached in the statement for the record that we submitted a list of all those that are attending.

We do have two people who at the last minute were unable to join us, Mr. Banks and Mr. Pfeiffer, so you can make note that they were not able to attend, in the list we have provided you.

Also, for the record, we submitted a complete written testimony, and we summarize that testimony on page 4. That gives a summary of the items that we are specifically asking for and the dollar amounts, et cetera.

Before I turn it over to the other members of the group to mention specific needs and concerns that they have with each of their respective areas, I would like to mention one concern that we all have, that affects all of us, and that is our concern over the fact that we have a lack of a consistent natural water policy. We can accept cost-sharing; in fact, we believe we have been cost-sharing for many years. And the cost-sharing language that is in both the H.R. 6 and the Senate bill 1567, as far as the method of repayment to the Federal Government, is acceptable. We can live with that type of cost-sharing.

What we can't live with is what the Administration has been requesting for the last several years, and that is what we term "upfront financing," which requires we participate in and provide all the financing during the construction period. If we could do that, we would have built the project already and been moving down the road.

Many of our projects just simply can't be done that way, especially dealing with the small communities in rural areas that we live in.

I know from your district, Mr. Chairman, you are also familiar with those activities and those types of communities.

We are aware that the House has passed H.R. 6 and that the Senate passed 1567. What we would like to urge is that the Conference Committee develop a consensus bill that would benefit the nation through proper development and management of the water resources of the country; and when this comes before the full Congress, that it get prompt attention and passage this year so we can have a water bill.

It has been almost nine years now, I guess, since we have had any type of major water legislation. We feel it is very important to our country to have that.

So, we would like to urge you to support that particular activity.

With me today are, again, representatives of the three associations, and Tom Payne is a businessman and rancher from McAlester, Oklahoma, and represents the Poteau/Deep Fork Association, and will make comments on that.

Tom?

[The statement follows:]

TESTIMONY

by

REDARK DEVELOPMENT AUTHORITY
EAST CENTRAL WATER ASSOCIATION
POTEAU/DEEP FORK ASSOCIATION
OKLAHOMA DELEGATION - RED RIVER VALLEY ASSOCIATION

before

THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
ENERGY AND WATER DEVELOPMENT

HONORABLE TOM BEVILL - CHAIRMAN
CONGRESSMAN FROM ALABAMA

WASHINGTON, D. C
14 APRIL 1986

ORAL TESTIMONY

before the

House Energy & Water Appropriation Subcommittee

14 April 86

Name	Representing*	Profession
Harvey Bollinger	RedArk	Executive Director
Tom Payne	PDFA	Businessman & Rancher
Bill Chapman	OK-RRVA	Attorney & Rancher
Beverly Rodgers	ECWA	Mayor, Holdenville, OK
Ron Bourbeau	ECWA	City Manager, Shawnee, OK
Leonard Briley	ECWA	City Manager, Ada, OK
Leodus Banks	ECWA	Mayor, Wewoka, OK

*RedArk - RedArk Development Authority
PDFA - Poteau/Deep Fork Association
OK-RRVA - Oklahoma Delegation of Red River Valley Association
ECWA - East Central Water Association

TESTIMONY ATTENDEES

	NAME	REPRESENTING*	PROFESSION
1.	Harvey Bollinger	RedArk	Executive Director
2.	Jim Bradshaw	ECWA	Shawnee News-Star
3.	Don Bodard	ECWA	
4.	Pierre Taron	ECWA	Mayor, Shawnee,OK
5.	Ron Bourbeau	ECWA	City Manager, Shawnee, OK
6.	Leonard Briley	ECWA	City Manager, Ada, OK
7.	Bill Shields	ECWA	Industrial Development
8.	Leodus Banks	ECWA	Mayor, Wewoka, OK
9.	Beverly Rodgers	ECWA	Mayor, Holdenville, OK
10.	John Butler	ECWA	Consulting Engineer
11.	Thomas Payne	PDFA	Businessman & Rancher
12.	Brad Bollinger	PDFA	Student
13.	Charles Pfeiffer	PDFA	City of Edmond
14.	Bill Chapman	OK-RRVA	Attorney & Rancher

*RedArk - RedArk Development Authority
ECWA - East Central Water Association
OK-RRVA - Oklahoma Delegation of Red River Valley Association
PDFA - Poteau/Deep Fork Association

TESTIMONY SUMMARY

	PROJECT	REQUIRED ACTION BY COMMITTEE
1.	Omnibus Water Legislation	Supplemental Appropriation Bill Upon Passage
2.	Arkansas River & Tributaries, South Central and Southeast Areas of Oklahoma Comprehensive Study	Appropriate $750,000 for Feasibility Study
3.	Arcadia Lake, Oklahoma	Appropriate $5,900,000 for Construction
4.	Canadian River & Tributaries	Appropriate $155,000 for Feasibility Study
5.	Red River Chloride Control, TX & OK	Appropriate $10,000,000 for Construction
6.	Red River Basin Comprehensive Study	Appropriate $1,150,000 for Feasibiity Study
7.	Hugo Lake, Oklahoma	Appropriate $230,000 for Hydropower Re-study
8.	Pine Creek Lake, Oklahoma	Appropriate $50,000 for Hydropower Re-study
9.	Lukfata Lake, Oklahoma	Appropriate $50,000 for Hydropower Study and USFWS Coordination
10.	McGee Creek Lake, Oklahoma	Appropriate $7,755,000 for Construction
11.	Sardis Lake, Oklahoma	Appropriate $500,000 for Recreation Area Construction
12.	East Central Water Supply Study	Appropriate $300,000 for Continuation of this Study
13.	Parker Lake, Oklahoma	Appropriate $950,000 to Complete On-going Planning and Engineering

RedArk Development Authority
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REDARK DEVELOPMENT AUTHORITY TESTIMONY

Mr. Chairman, I want to express our appreciation for this opportunity to meet with this committee to discuss what we consider the most crucial question facing our nation, "how do we develop our nation's water resources in order to avoid a national water crisis?" We consider it an honor and a privilege to testify before this committee because we feel that without a strong multi-purpose national water development program, many of the other important aspects of our country's future, including the nation's defense program are really being built on an very unstable foundation. We also consider it a responsibility to work with you and the committee.

The RedArk Development Authority (RedArk) is a public trust established under the laws of the State of Oklahoma for a 21-county area of east central and southeast Oklahoma. The name RedArk is derived from the fact that the area lies immediately between two major water resources, the Red and the Arkansas Rivers. The purpose of RedArk is to undertake the maximum potential development of the area's water and natural resources with the objective of obtaining the maximum potential economic and employment benefits for the people of that area. With this purpose in mind, RedArk is vitally concerned with the development of not only what we consider our area's most vital resource, but also the most vital resource of our great nation--WATER.

East Central and Southeastern Oklahoma is rich in water and natural resources, but this area of Oklahoma has lagged far behind the state and the Nation in capitalizing the untapped potential of its natural resource base. The economic and job development potential of these resources has not as yet been of significant benefit to the people of the project area.

When one looks at the RedArk area and the poor economic and employment conditions that exist, and yet realizes the area is rich in water and natural resources, one has to come to the conclusion that there's no justifiable reason for the situation to exist. It is a realization of this untapped potential that makes it not only a privilege for us to appear before you to testify about water development in this area, but it actually becomes a mandate to do so.

To achieve its principal purpose, RedArk has initiated a comprehensive, multi-purpose, water resource development program. This program includes hydropower development, water supply, recreation, flood control, and water quality activities. In our role as a planning and implementing authority, RedArk works closely with the three citizens water associations in our area: East Central Water Association, Poteau/Deep Fork Association, and the Oklahoma Delegation of the Red River Valley Association.

With me today are representatives from each of these three water associations. A list of attendees is attached to this testimony for the record. However, before I turn to them to make short comments about specific needs of their individual area, I would like to draw your attention to certain items which are of general importance to the entire RedArk area and are specific concerns which I have.

The first of these is in the area of water resource development. Our country is facing a crisis which will make our energy crisis appear to be insignificant. We do not have a national water policy. The lack of such a water policy is leading our country toward a national water crisis. Water is involved in all aspects of our daily lives. With all of our advanced technology, with all of our great scientific expertise, we have never been able to find anything that we can substitute for water.

We talk about economic recovery programs, and we talk about our national defense program. Mr. Chairman, I ask you to consider for just a few minutes where is the econommic recovery program going to be and where is the national defense program going to be if we don't have water. If we don't have a national water resource development program, where are we going to get the water supply to meet the needs of industry and to meet the needs of our country during a miltary emergency? Where are we going to get the water delivery systems that can provide a country with clean, fresh, pure, potable water that protects our health and provides us with the ability to produce and to process our goods for distribution all over this planet.

The current Administration's policies and proposed budget for water resource development is not only going to destroy the water resource program of the entire nation, but it is particularly going to destroy that program in rural areas such as ours. These policies and budget proposals will speed up our pace of arriving at a national water crisis.

The Administration says we simply want you to cost share in water resource projects. Well, let's talk about cost sharing for a minute. Is cost sharing a new concept? No, we have had cost sharing for a long time. In fact, most of the Corps of Engineers and Bureau of Reclamation's water projects are heavily cost shared. Almost all of the project cost of these projects is repaid to the Federal Treasury, with interest, over a 50-year time period (the life of the project). An example of the cost sharing that we've been participating in for years is the McGee Creek Project, a Bureau of Reclamation project currently under construction within 60 miles of McAlester. Eighty-seven percent (87%) of this project's total cost will be paid back to the

Federal Government with interest. So there is nothing new about the fact that we're sharing in the cost. Water projects funded through the Bureau and the Corps are not grant programs.

Okay, we've always had cost-sharing. What is the real question? The real question is just when and how much. The Administration wants "100 percent" of the cost on hydropower and municipal and industrial water supplies to be provided "upfront" by non-federal entities. On navigation projects it wants 75 percent upfront, on recreation projects it wants 50 percent upfront, and on flood control it wants 35 percent upfront. Upfront, that means before the project ever starts.

But what if I can't afford to finance the project upfront, and yet I still have a resource that needs to be developed, I still have a resource that can provide a positive input to strengthening our country as a whole. Yes, it's probably going to strengthen my particiular area. But then that's how you strengthen the whole, you strengthen the parts. Our national water policy needs to be based on this concept...that we're going to look at our nation's water resources and to develop those water resources in the best interest of our nation as a whole. We are going to do that by developing the water resources that are beneficial to our nation from each area of our area, irrespective of whether that area has the ability to finance that development on its own.

The policies and budget proposals by this Administration are 180 degrees in the opposite direction. The Administration has refused to include new water projects in its budget, unless non-federal sponsors agree to these cost-sharing policies based on the upfront concept. This is done irrespective of the fact that Congress has never authorized a change in the cost-sharing structure of water resource projects.

Water projects are the only projects on a federal level that must go through a rigorious benefit to cost ratio analysis. Under the Administration's upfront cost sharing policy, projects are going to be included in his budget which may only have a benefit cost ratio of 1.01 to 1.00, if they agree and have the ability to provide the upfront cost sharing while projects that might have a 2.0 to 1.0 benefit to cost ratio will be left out of the budget because the local area does not have the financial ability to provide the upfront cost sharing. Now, I ask you. Is that the optimal development of our nation's water resources for the benefit of our nation as a whole.

We request that Congress (1) recognize the existing danger of a national water crisis and take all actions necessary to avoid such a crisis; (2) establish a national water policy which recognizes the importance of water in the development of all aspects of our economy; (3) develop a cost-sharing program which will encourage the development of the water resources in all areas of our country, not just in those parts of the nation which can afford upfront financing; and (4) continue to resist pressure from the Administration to give a higher priority to projects whose sponsors have agreed to the Administration's up-front requirements, and continue to authorize projects and appropriate funds based only on policies which have been enacted by Congress and signed into law by the President.

We are aware that the House has earlier passed omnibus water legislation in 99HR6 and that the Senate recently passed its version of such legislation in 99S1567. We urge the Conference Committee to develop a consensus omnibus bill that would benefit the nation through the proper development and management of the water resources of America and the full Congress to give prompt attention to the passage of such legislation this year.

POTEAU/DEEP FORK
ASSOCIATION

POTEAU/DEEP FORK ASSOCIATION TESTIMONY

The Poteau/Deep Fork Association (PDFA) is a voluntary citizens' group interested in supporting water development projects and other natural resource development in the 10 counties of Oklahoma impacted by the Poteau and Deep Fork Rivers. These counties are: LeFlore, Haskell, Latimer, Pittsburg, McIntosh, Okmulgee, Okfuskee, Lincoln, Creek and Oklahoma. These 10 counties have an combined population of 816,000. The PDFA was formed for the purpose of promoting the orderly development of the water and natural resources in these two river basins.

The Deep Fork River is a tributary of the Canadian River; forms one of the major arms of Lake Eufaula, an existing COE multipurpose project; and ultimately empties into the existing McCellan-Kerr navigation channel on the Arkansas River. The river originates in the central part of Oklahoma near Oklahoma City. It is 220 river miles long with an average fall of two feet per mile. The channel is crooked and filled with obstructions. Flooding occurs because of inadequate channel capacity caused by much of the watershed having channel slopes as flat as one foot per mile and average velocities as low as one foot per second. These conditions allow flood flows to escape the channel, fill the lowlands, and deposit the sediment load which results in additional flattening of these lower reaches. Over time the flood area is expanded because of the sediment deposition. Average annual damages of crops and structures is over $200,000.

The flood plain has additional problems. Due to the high sediment load of the river and poor natural drainage, levees have formed adjacent to the river. These levees trap flood waters and do not allow drainage once the flood waters have subsided. There are 34,000 acres of potential farmland that remains wet for many months. It is important to note that these are not natural wetland areas but have been formed throughout the years as a result of man's activities in the basin and his lack of conservation and resource management programs. These conditions result in the overgrowth of trees and brush and make otherwise prime farmland unsuitable for agricultural purposes.

The Poteau River drains an area of about 1,900 square miles in eastern Oklahoma and western Arkansas. The drainage basin, which is about 1.2 percent of the drainage area of the Arkansas River, is roughly rectangular in shape and is mountainous. There are approximately three billion tons of coal reserves located in the basin and they are being mined at an increasing rate. In addition, approximately one million bushels of soybeans are produced each year in the area. Expanding industrial activity in the basin; especially near Ft. Smith, Arkansas and in LeFlore County, Oklahoma; are placing increasing demands on the area's ability to provide an ample quantity and satisfactory quality of municipal and industrial water. Three major industrial facilities have moved to LeFlore County this year. One facility, a co-generation plant, will employ 1,200 people during the four-year construction period and 130 people for the life of the plant's operation. This plant will consume approximately one million tons of coal per year. The facility also will house an CO2 plant and a paper recycling plant.

Navigation in this area is not a new concept. It was championed in the latter 1950s by the late Senator Robert S. Kerr as an original part of the McCellan-Kerr Navigation System to serve the major industrial center of Oklahoma City and the vast agricultural grain industry of western Oklahoma and the Texas panhandle. A report showing the project to be economically feasible was forwarded by the Tulsa District to the southwest division and hence to the Office of Chief of Engineers in the early 1960s. Unfortunately, the Board of Engineers for rivers and harbours rejected the report on the grounds that Tulsa District had over estimated shipments of petroleum products and coal that would be carried by the waterway. The project was then dropped. It is important to note that although this project did show an economc feasibility at one time, it was a single purpose (navigation) project.

The Oklahoma Water Resources Board recently completed a state water plan which included a project to transfer excess flood waters from the Robert S. Kerr Lake, a part of the existing navigation channel on the Arkansas River, the water eficient areas in metropolitian Oklahoma City and the tremendously productive agricultural areas of the high plains of Oklahoma. The agriculture of this area is heavily depended upon irrigation and is in jeopardy because of the eight-state ogallala ground water aquafer. Although technically feasible, the project did not prove economically feasible under current conditions and evaluation criteria. This plan called for water to be transported by non-navigation canals, fish stations and aqua ducks along a route closely paralleling the proposed navigation route. Again, this project was designed and evaluated as a single purpose project (water supply). To maximize the potential of this water resource, we must quit looking at it as single purpose projects and consider it from a multipurpose standpoint. This multipurpose approach would include ways of combining navigation and water supply plans as well as other purposes such as hydropower, recreation and flood control.

Several efforts are underway in the PDFA area to develop solutions for the problems and needs just presented. The following resolutions represent the PDFA's position regarding each of these efforts. The membership of the PDFA respectfully ask that your subcommittee honor the requests contained in these resolutions. Thank you for your time, attention, and continued support.

RESOLUTION I

POTEAU/DEEP FORK COMPREHENSIVE STUDY, OKLAHOMA

The Arkansas River and Tributaries, South Central and Southeast Areas of Oklahoma Comprehensive Study (authorized by PL 98-63, 30 July 1983) was initiated in October 1983. A reconnaissance report was completed by the Corps of Engineers in March, 1985. Feasibility studies are underway at full Federal expense, as directed by Congress, with completion scheduled for December, 1988.

The comprehensive study will recommend measures for: flood control; development of water supply, treatment and conveyance facilities; generation of hydroelectric power; development and enhancement of the recreational potentials and enterprises of the region; and improvement of the rivers for navigation and port site development. The study will also address which features of a comprehensive plan could best be accomplished by Federal, State or local entities and private interests.

The Poteau/Deep Fork Association agrees with the position Congress has taken regarding no cost-sharing on this feasibility study. We understand that the Corps has testified before Congress that completion of this study could be moved to October 1988 if full capability funding levels were received in FY '87. The PDFA strongly support continued funding at full capability of this study and request Congress to appropriate $750,000 for feasibilty studies at 100 pecent Federal cost.

RESOLUTION II

ARCADIA LAKE, OKLAHOMA

Arcadia Lake is located at mile 213.8 on the Deep Fork River; in the metropolitan area of Oklahoma City and Edmond, Oklahoma; about one and one-half miles west of Arcadia, Oklahoma. Arcadia Lake was authorized by the Flood Control Act of 1970 for the purposes of flood control, water supply and recreation. Construction on the COE lake began in September 1980. The entire project is about 53 percent complete. The total estimated cost is $85.3 million.

The City of Edmond, as a local sponsor, has signed contracts with the Corps to repay the cost of water supply and one-half the separable recreation costs. This equals to about 56 percent of the total project cost. This is another example of how well our Congressional approved cost-sharing policies on water resource projects work.

The PDFA wants to go on record as being a strong supporter of the continued funding for the construction of the Lake Arcadia project. We therefore request that this Committee appropriate $5,900,000 to the Corps to continue the construction of this project in FY 1987. The PDFA also congratulates the Corps for the completion of this lake continuing in relatively short order and with scheduled funding at a cost below the authorized ceiling.

RESOLUTION III

CANADIAN RIVER AND TRIBUTARIES

The Canadian River and Tributaries Study was authorized by the Flood Control Act of 1937 (PL 75-406); PL 79-525; Senate Committee Resolutions of 1944, 1949 and 1976; and House Committee Resolutions of 1944, 1950 and 1976. The Deep Fork River, with a drainage area of 2,548 square miles, is a major tributary of the Canadian River.

The Corps, with funds included in the FY '86 Energy and Water Appropriations Bill, continued studies in cooperation with the USDA-Soil Conservation Service (SCS) on the flood control and drainage problems of the Deep Fork River. The Corps study included the development of alternatives for channel improvement measures along the main stem of the river. The SCS is continuing the development of the upstream watershed structures that would complement the flood protection afforded by implementable plans along the main stem. This project represents an excellent example of the coordinated use of the resources of two federal water agencies to address a significant, and at times, life-threatening problem of those people who live along the Deep Fork River.

The Tulsa District of the Corps of Engineers completed a reconnaissance study of the Deep Fork River portion of the Canadian River Study in November, 1984. An interim feasibility report on the Deep Fork River has been initiated and is scheduled for completion in March, 1987. A plan of study for a demonstration reach located near Sparks, Oklahoma, has been completed as a part of this interim report effort and is currently being evaluated.

The PDFA is concerned about the flooding and drainage problems in the Deep fork Basin, which manifested themself again this year. The Association strongly urges the Corps to complete, as soon as possible and at full Federal expense, the feasibility study on these flood and drainage problems and to appropriate $155,000 for such in FY '87.

RED RIVER VALLEY ASSOCIATION

Oklahoma
Delegation

OKLAHOMA DELEGATION --RED RIVER VALLEY ASSOCIATION TESTIMONY

Mr. Chairman, 12 of the 21 counties in the RedArk area lie within the Red River Basin. We in Oklahoma are concerned with several projects in the Red River Valley. This is appropriate since almost half of the State of Oklahoma is in the drainage basin of the Red River. We, as the Oklahoma Delegation, represent one of the four states which are members of the Red River Valley Association. In fact, two members of our group serve on the Board of Directors of the Association with me also holding the position of Vice President of the Association for Oklahoma.

The Red River Valley Association is a voluntary group of citizens banded together to advance the economic development and future well-being of the citizens of the four state Red River Basin area in Arkansas, Louisiana, Oklahoma and Texas.

The Association has for 61 years done notable work in the support and advancement of a program to develop the land and water resources of the valley to the beneficial use of all the people. To this end, the Red River Valley Association offers its full support and assistance to the various Port Authorities, Chambers of Commerce, Economic Development Districts and other local governmental entities in developing the river basin.

The resolutions contained herein were presented by the Oklahoma Delegation and adopted by the full Association during its 61st Annual Meeting in Shreveport, Louisiana, on February 12-14, 1986, and represent the combined concerns of the citizens of the Oklahoma portion of the Red River Basin as they pertain to the goals of the Association, specifically:

....Economic and Community Development
....Flood Control
....Bank Stabilization
....A Clean Water Supply for Residential, Commercial, Industrial and Agricultural Use
....Solar and Hydroelectric Power Generation
....Navigation

The Red River Valley Association is aware of the constraints on the federal budget, and have kept those restraints in mind as the resolutions were adopted. Therefore, and because of the far-reaching regional and national benefits addressed by the various projects covered in these resolutions, we urge the members of

Congress to review the materials contained herein and give serious consideration to funding the projects at the levels requested.

RED RIVER CHLORIDE CONTROL RESOLUTION

The approval of the Red River Chloride Control report, submitted to the Secretary of the Army in August 1977, was deferred pending an economic re-analysis to be conducted by the Corps of Engineers. The economic re-analysis, which reaffirmed the economic feasibility, was submitted to the Secretary of the Army for final action in 1981. The Red River Valley Association understands that although the Secretary has approved the report, release of the approval has been delayed pending resolution of cost-sharing questions with state and local entities.

This project was authorized for construction (PL 89-789 and PL 91-611) with the removal of natural pollution as a Federal responsibility, while removal of man-made pollution is a non-Federal responsibility. Since the time these responsibilities were agreed to, Red River Valley Association members have worked closely with the participating states to assure that local responsibilities have been successfully undertaken in a fully cooperative manner. This effort was performed in anticipation that Federal responsibilities would be executed in a responsible and timely fashion. The State of Texas has expended over $52 million controlling man-made salt pollution over the past years, and the State of Oklahoma is spending $5 million annually.

Therefore, we fully believe the non-federal role is being achieved and will continue to be strengthened. However, the cooperative project goal to make basin waters suitable for beneficial use cannot be attained unless the Federal government honors its long-standing commitment and discharges its responsibilities. The Red River Valley Association strongly requests that the Secretary of the Army immediately forward the report on this project to OMB with a favorable recommendation for the initiation of construction on the remaining areas, and the Corps of Engineers receive 100 percent Federal funding in the amount of $10,000,000 to initiate construction on Areas VI & X in FY '87.

RED RIVER BASIN COMPREHENSIVE STUDY RESOLUTION

The Red River Basin Comprehensive Study, authorized by PL 98-63, 30 July 1983, was initiated in October 1983. A reconnaissance report was submitted in March 1985 by the Tulsa District of the Corps of Engineers for the Oklahoma portion of the Basin. Feasibility studies for the Oklahoma portion are underway at full Federal expense, as directed by Congress, with completion scheduled for March 1989.

The comprehensive study will recommend measures for: flood control, development of water supply, treatment and conveyance facilities, generation of hydro-electric power, development and enhancement of the recreational potentiais and enterprises of the region, and improvement of the rivers for navigation and port site development. The study will also address which features of a comprehensive plan could best be acomplished by Federal, State, local entities and private interests.

The Red River Valley Association agrees with the position Congress has taken regarding cost-sharing on this project. We understand that the Corps has testified before Congress that completion of this study could be moved to October 1988 if full capablity were received in FY '87. The Red River Valley Association strongly supports continued funding at full capability of this study and requests Congress to appropriate $1,150,000 for feasibility studies at 100 percent Federal cost.

HUGO LAKE

Hugo Lake was authorized by the Flood Control Act of 1946 for the purposes of flood control, water supply, water quality, recreation, and fish and wildlife. Construction began in October 1967, and impoundment of the lake began in January 1974. The damsite is located at river mile 17.6 on the Kiamichi River about seven miles east of Hugo, Oklahoma.

A study to determine the feasibility of adding hydropower facilities to the existing Hugo Lake project is being conducted under the authority of Section 216, PL 91-611, December 1970. Preliminary studies completed in October 1982 showed that a 15 mega-watt hydropower plant may be economicallly feasible and detailed feasibility studies are being continued. The Red River Valley Association recommends that the Corps of Engineers receive funds in the amount of $230,000 to complete this study at 100 percent Federal cost.

PINE CREEK LAKE RESOLUTION

Pine Creek Lake was authorized by the Flood Control Act of 1958 for the purposes of flood control, water supply, water quality, and fish and wildlife. The damsite is located on the Little River about five miles northeast of Wright City, Oklahoma.

A study to determine the feasibility of adding hydropower facilities to the existing Pine Creek Lake project is being conducted under the authority of Section 216, PL 91-611, December 1970. Preliminary studies, completed in October 1982, showed that a 40 mega-watt hydropower plant may be economically feasible. The Red River Valley Association recommends that the Corps of Engineers receive $50,000 to complete this study at 100 percent Federal cost.

LUKFATA PROJECT RESOLUTION

Lukfata Lake on Glover Creek in central McCurtain County in southeastern Oklahoma was authorized by the Flood Control Act of 1958 as a component of the six-reservoir system for flood control in the Little River Basin. All of the reservoirs except Lukfata Lake have been completed; without the Lukfata project, the system does not function as planned.

In the Energy and Water Development Appropriations Bill of .1982, HR97-177, 14 July 1981, the Committee on Appropriations directed the Corps, within the limits of available funds, to study the potential of hydropower generation at Lukfata Lake. A preliminary study was completed in May 1983. The study showed that a 65 mega-watt hydropower plant could be developed as a part of the project at the lower site.

Consultations between the U.S. Fish and Wildlife Service and the Tulsa District Corps of Engineers have resulted in an opinion by the USFWS that the proposed project would adversely affect an endangered specie the leopard darter and its habitat therefore threatening its continued existence. After reviewing the opinion, Tulsa District is considering a request for exemption from the Endangered Species Act. However, additional studies need to be accomplished to obtain information that could be an important element in designing a workable mitigation plan for inclusion in the exemption request. Those studies will be initiated upon receipt of additional study funds.

The Red River Valley Association supports continued studies of the Lukfata project by the Corps of Engineers at 100 percent Federal cost and request that $50,000 be appropriated for this purpose.

McGEE CREEK RESOLUTION

McGee Creek Lake was authorized for construction, operation, and maintenance in accordance with Federal Reclamation Laws by PL 94-123, September 28, 1976. McGee Creek Lake is located in Atoka County in Southeastern Oklahoma. McGee Creek is a northern tributary of the Red River. The damsite is about 3.4 miles about the confluence of McGee and Muddy Boggy Creeks. The project was authorized for water supply, flood control, and recreation. Construction began on the project in June 1982.

The Red River Valley Association strongly supports continuation of this project, and the concept demonstrated in the project of maximum development of the local economy by maximum utilization of opportunities provided by the project's development. The Association recommend the members of the McGee Creek Authority to continue to cooperate with the basin interests to fully develop the economic potential of this project for the benefit of the project area and the nation. The Red River Valley Association request that $7,755,000 be provided to continue this project.

SARDIS LAKE RESOLUTION

Sardis Lake is located at mile 2.8 on Jackfork Creek, a tributary of the Kiamichi River, about three miles north of Clayton. The lake was authorized in the Flood Control Act of 1962 for the purposes of flood control, water supply and recreation. Construction began in 1975. Impoundment of Jackfork Creek behind the structure occurred with the official gate closing in January 1983. The Dam and Lake were officially dedicated in June 1983.

As authorized, the recreation areas at Sardis Lake were to be constructed at full Federal expense. Recreation facilities estimated to cost $2,400,000 remain unconstructed. The Red River Valley Association strongly recommends Congress appropriate $500,000 of the remaining funds, at full Federal expense, to accomplish the recreation development at Sardis Lake in order to provide the benefits originally planned and authorized.

East Central Water Association
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EAST CENTRAL WATER ASSOCIATION TESTIMONY

The East Central Water Association is a voluntary group of citizens banded together in the interest of supporting water development projects and other natural resources development in the east central counties of Oklahoma. The ECWA promotes the orderly development of the area water and natural resources to advance the economic development and future wellbeing of the citizens of the five-county area. These Oklahoma counties are: Coal, Hughes, Pontotoc, Pottawatomie and Seminole.

The five counties which comprise the East Central area have a combined population as in the 1980 census of approximately 134,000 people. This five-county area is the most rapidly growing area in southeastern Oklahoma. It is an area which is not only experiencing significant population growth but also major expansion in the manufacturing and industrial sectors. Cities in these east central counties, such as Ada, Shawnee, Tecumseh, Seminole, Wewoka, Coalgate and Holdenville are in extreme need of an adequate municipal and industrial water supply.

However, at this time, there are no existing, under construction or authorized Corps of Engineers or Bureau of Reclamation lakes within the east central area. In fact, there are not any lakes which have a significant water supply storage capability within the area. Water rationing has been an regular occurrence over the past several summers for nearly all the communities within this area.

This critical need for future water supply is clearly demonstrated by the competition for the municipal and industrial water supply storqe to be provided by the proposed Parker Lake located in the northern part of Coal County. Although construction of this lake has not even been started, applications for water rights already exceed by 10 times the amount of water which will be available from the lake.

The East Central Water Association, at its annual meeting (22 March 1986 - Ada, Oklahoma), adopted the following resolutions (A through D) and hereby ask that this subcommittee consider the request of each. Enclosed immediately following the above mentioned resolutions are resolutions adopted by the governing bodies of several of the communities in the area in support of Parker Lake. The membership and area represented by the East Central Water Association thanks you for your attention and the opportunity to testify before this subcommittee.

RESOLUTION A

NORTH DEER CREEK WATERSHED

WHEREAS, the Soil Conservation Service has completed the Watershed Plan and Environmental Impact Statement for the North Deer Creek Watershed and submitted said plan to the Washington office of the USDA-SCS; and,

WHEREAS, said plan consists of the following project measures: (1) multipurpose structure for retarding flood water and for municipal, industrial and recreation water storage; (2) recreation facilities; and (3) mitigation measures, AND FURTHERMORE the total project cost is estimated to be $15,091,210 of which $3,223,680 will be provided from PL 83-566 funds and the remaining $11,867,530 from other funds, AND FURTHERMORE, the project has a benefit-cost ratio of 1.06:1; and,

WHEREAS, the Cleveland County Conservation District, Oklahoma County Conservation District, Shawnee Conservation District and Pottawatomie County Development Authority, as local sponsors, have agreed to the plan and proposed cost sharing agreements.

NOW THEREFORE BE IT RESOLVED, the East Central Water Association (ECWA) strongly supports this project and urges prompt approval of this plan by the Secretary of Agriculture and the Office of Management and Budget (OMB); AND BE IT FURTHER RESOLVED, the ECWA requests that both the House Committee on Public Works and Transportation and the Senate Committee on Environment and Public Works authorize the project; AND BE IT FURTHER RESOLVED, the ECWA requests OMB to approve this project as a new construction start in 1987; and BE IT FURTHER RESOLVED, that the ECWA requests the HOUSE AND SENATE APPROPRIATIONS COMMITTEES to include sufficient funds to construct this project in the 1987 appropriations for the PL 83-566 program; AND BE IT FURTHER RESOLVED, the ECWA requests the Washington office of the USDA-SCS to apportion sufficient funds for said project to Oklahoma and that the Oklahoma State Office of the USDA-SCS establish this as its first priority for PL 83-566 funds within the State of Oklahoma in order for construction of the North Deer Creek Watershed to begin as soon as possible.

RESOLUTION B

EAST CENTRAL OKLAHOMA WATER SUPPLY STUDY

WHEREAS, the Bureau of Reclamation was authorized to conduct this study by PL 93-360, dated July 16, 1984, entitled "Appropriations for Energy and Water Development for FY 1985", AND FURTHERMORE, the 1986 Energy and Water Development Appropriations Act, PL 99-141 provided $300,000 for the continuation of this study; and, WHEREAS, the purpose of this study is to serve as a guide toward the most beneficial development of the water and related land resources for municipal and industrial (M&I) water supply system, hydroelectric power, navigation, irrigation, flood control, recreation, and environmental enhancement purposes; AND FURTHERMORE, that this study covers all or parts of Coal, Hughes, Lincoln, Okfuskee, Pontotoc, Pottawatomie and Seminole counties, an area of Oklahoma in which there are no existing; under construction or authorized Corps of Engineers or Bureau of Reclamation lakes or any lakes with a significant water supply storage capability; however, an area in which such cities as Ada, Shawnee, Tecumseh, Seminole, Wewoka, Coalgate and Holdenville are in extreme need of an adequate M&I water supply and where water rationing has been a regular occurrence over the past several summers; and,

WHEREAS, the proposed FY '87 Federal Budget for the Southwest Region of the Bureau of Reclamation includes no funds for the continuation of this study, AND FURTHERMORE, the Bureau of Reclamation has testified before Congress that the work elements included in the Plan of Study for this project can not be completed with FY '86 funds, thereby resulting in this study being stopped without conclusions or recommendations.

NOW THEREFORE BE IT RESOLVED, the East Central Water Association (ECWA) strongly supports this study effort and requests that Congress appropriate $300,000 in the FY '87 Energy and Water Appropriations Act for the continuation of this study.

RESOLUTION C

PARKER LAKE, OKLAHOMA

WHEREAS, the Corps of Engineers completed an Interim Survey Report on Parker Lake in 1975 as an early action project recommended in the Red River Below Denison Dam Comprehensive Basin Study; AND FURTHERMORE, the project was recommended for construction by the Chief of Engineers (OCE) in his 30 May 1980 report; AND FURTHERMORE, a report recommending the construction of the project was approved by the Office of Secretary of the Army (OSA) and transmitted to the Water Resources Council on 15 January 1981 and was returned to the Assistant Secretary of Army (CW) in October 1981 as a result of the Water Resources Council being discontinued; AND FURTHERMORE, said report with a recommendation to construct the project was transmitted to the Office of Management and Budget (OMB) on the 25 April 1985 by the Assistant Secretary of the Army (CW).

WHEREAS, said report recommends Parker Lake as a multipurpose project on Muddy Boggy Creek which would provide protection against the standard project flood, and a dependable water supply of 42 million gallons per day for municipal and industrial (M&I) purposes, recreation lands for future use, and fish and wildlife mitigation, AND FURTHERMORE, the total project cost is estimated at $48,100,000 and has a benefit-cost ratio of 1.2:1; and, WHEREAS, the Parker Lake project was authorized for construction by PL 99-88, 15 August 1985 (FY '85 Supplemental Appropriation Act) contingent upon the execution of a local cost-sharing agreement with a non-Federal entity under terms and conditions acceptable to the OSA by 30 June 1986; and,

WHEREAS, the Oklahoma Water Resources Board (OWRB) and the RedArk Development Authority (RedArk) both indicated a willingness to agree to be the non-Federal sponsor and met with the Tulsa District COE on 13 August 1985 to discuss a cost-sharing agreement for Parker Lake consistent with OCE and SWD directions; AND FURTHERMORE, OWRB provided a draft letter of assurance (LOA) to the Tulsa District on 4 September 1985 and in said draft LOA OWRB agreed to non-Federal cost sharing as allowable under the provisions of Senate Bill 1567; AND FURTHERMORE, no official response from the OSA to its draft LOA has been received by OWRB.

WHEREAS, on the 12 December 1985, the OMB sent a letter to OSA stating that there is no Federal interest in constructing Parker because its flood control benefits are only eight percent of the total benefits; however, OMB has no objective to the completion of on-going planning and engineering by the COE, with the results turned over to local interest for their review and action.

WHEREAS, the 1986 Energy and Water Appropriations Act provided $600,000 for the Continuation of Planning and Engineering efforts on Parker Lake which are being used to complete certain Design Memorandums; AND FURTHERMORE, the COE testified before Congress that said FY '86 funds were not sufficient to complete all Design Memorandums necessary to construct the project; AND FURTHERMORE, the proposed FY '87 Federal Budget includes no funds to complete the remaining Design Memorandums; and,

WHEREAS, Parker Lake was approved by the House for construction in 99HR6 and is included for authorization in 99S1567.

NOW THEREFORE BE IT RESOLVED, that the East Central Water Association (ECWA) contends that (1) the OSA recommended the project for construction as a multipurpose project, (2) there exists no authorized criteria or guidelines which allow OMB to declare a project with only eight percent flood benefits a single purpose project, and therefore, there to be no Federal interest in its construction, (3) that Congress declare a Federal interest in Parker Lake by authorizing it for construction in PL 99-88, (4) that OMB has no authority to direct the OSA to not fulfill its responsibilities as established by acts of Congress, (5) the OSA has neglected to comply with the Congressional directive to realistically pursue a cost-sharing agreement with a non-Federal entity as per PL 99-88, (6) if current FY '86 funds are being used to develop certain Design Memorandums, the directive to complete on-going planning and engineering requires the OSA to complete all Design Memorandums, and (7) the OSA has no plans to complete the on-going planning and engineering as per OMB directive; AND BE IT FURTHER RESOLVED, that the ECWA request

Congress to (1) authorize Parker Lake for construction in such a manner that its intent will be carried out by the OSA, (2) directs the OSA to complete all Design Memorandums and (3) to provide funds in the amount of $950,000 in the FY '87 Energy and Water Development Appropriations Bill to comply with the OMB directions to complete the on-going planning and engineering.

RESOLUTION D

USDA - SOIL CONSERVATION SERVICE

WHEREAS, the Soil Conservation Service (SCS) program has made a significant contribution to the proper management of our national water and related land resources; and,

WHEREAS, the continued proper management of such water and related land resources is still clearly in the national interest; AND FURTHERMORE, that the national goals and objectives which lead Congress to establish the SCS program have not been totally accomplished; and,

WHEREAS, the proposed FY '87 Federal Budget will reduce the funds available to the SCS for the continuation of its programs on a national level by $209.1 million (a 31.4 percent reduction from the FY '86 budget level); AND FURTHERMORE, result in the complete elimination of the PL-566, RC&D, Great Plains, River Basin, PL-539 and other important program components.

NOW THEREFORE BE IT RESOLVED that the East Central Water Association (ECWA) strongly supports the continuation of SCS Programs; AND BE IT FURTHER RESOLVED, that the ECWA requests Congress to provide sufficient funds for the continuation of these programs especially the PL-566 and RC&D activities.

RESOLUTION NO. 5323

A RESOLUTION EXPRESSING THE CONTINUED INTEREST OF THE CITY OF SHAWNEE, OKLAHOMA IN THE DEVELOPMENT OF PARKER RESERVOIR AS A SOURCE OF WATER FOR ITS CITIZENS; AND DECLARING AN EMERGENCY.

WHEREAS, one of the most serious problems facing the City of Shawnee is an inadequate supply of raw water; and

WHEREAS, due to this inadequacy, the City has had to implement a water rationing plan on several occasions; and

WHEREAS, various alternatives have been considered to supplement the present source of water; and

WHEREAS, it appears the development of Parker Reservoir southeast of Ada, Oklahoma, in Pontotoc County, is a practical alternative for the City of Shawnee in obtaining raw water to supplement its needs.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND BOARD OF COMMISSIONERS OF THE CITY OF SHAWNEE, OKLAHOMA that said City hereby expresses its continued interest and support for development of Parker Reservoir as a supplemental source of raw water for its citizens, as well as such for other communities and cities in the area.

BE IT FURTHER RESOLVED that the City urges the federal government to provide assistance for said Parker Reservoir Project so that the U. S. Corps of Engineers can proceed posthaste to expedite construction to allow the City of Shawnee and others to be receiving water from said source at the earliest possible date.

BE IT FURTHER RESOLVED that for the preservation of the public peace, health and safety, an emergency is hereby declared to exist by reason whereof this resolution shall be in full force and effect immediately upon its adoption.

PASSED AND APPROVED this 7th day of April, 1986.

ACTING MAYOR

ATTEST:

Clara Hurst

CITY CLERK

RESOLUTION NO. 184(86)

WHEREAS, The City of Moore, Oklahoma has experienced water shortage in the past due in part to the dropping of the water table in the Garber-Wellington Aqufier, and

WHEREAS, in the past the City of Moore, Oklahoma has drilled additional wells in the Garber-Wellington Aqufier to satisfy their current needs, and

WHEREAS, from time to time the levels of selenium are above the maximum level as established by the EPA for safe drinking water in some of the wells, and

WHEREAS, the Association of Central Oklahoma Governments has made a study of the Garber-Wellington Aquifier, and found that the recharge of the formation is less than the present demand, and

WHEREAS, the City of Moore, Oklahoma has determined that by the year 2005 that they will need as much as 15,000,000 gallons of water per day, and

WHEREAS, THE City of Moore, Oklahoma desires to look forward and make arrangements for another water supply other than the Garber-Wellington Aquifier to assure safe drinking water in adequate quantities to serve the residents of the City of Moore, Oklahoma, and

WHEREAS, a study of east central Oklahoma water has identified possible water supplies in eastern Oklahoma, and

WHEREAS, the existing surface water is not economically available in sufficient quanities for the City of Moore, Oklahoma, in central Oklahoma, and

WHEREAS, Red Ark Development Authority has established a water resources task force with representatives from the U.S. Army Corps of Engineers, Department of Interior/Bureau of Reclaimation, USDA/Soil Conservation Service, Oklahoma Water Resources Board, and Tennessee Valley Authority to investigate strategies for the full development of area water resources, and

WHEREAS, the Red Ark Development Authority through its Task Force has identified Parker Reservior as a potential water supply, and

WHEREAS, the City of Moore, Oklahoma, and Red Ark Development Authority has applied for water rights to Parker Reservior from the Oklahoma Water Resources Board, and

WHEREAS, the Oklahoma Water Resources Board and Red Ark Development Authority has indicated a willingness to be a non-federal sponser and have met with the Tulsa District Corps of Engineers to discuss cost sharing agreements for Parker Lake consistant with those allowed under Senate Bill 1567, and have submitted draft letters of assurance regarding said cost sharing agreements,

NOW THEREFORE, BE IT RESOLVED, the the City Council of the City of Moore, Oklahoma requests that Congress continue to participate through funding of the Corps of Engineers with Red Ark Development Authority, Oklahoma Water Resources Board and other potential users to continue the planning and engineering on Parker Reservior to ultimately complete construction.

ADOPTED this 7th day of April, 1986, at a regularly scheduled meeting of the City Council.

Louis Kindrick
Louis Kindrick, Mayor

ATTEST

RESOLUTION
RS 85-86-8

WHEREAS, The City of Wewoka with a population of 5,480, serves as the County Seat of Seminole County, which has a population of 27,473; and

WHEREAS, The City of Wewoka has the responsibility to provide water for the residential, commercial and industrial needs of its citizens and in addition, is the source of water for three rural water systems; and

WHEREAS, The City of Wewoka and the entire County of Seminole have for several years experienced both quality and quantity problems with its existing water suppliers; and

WHEREAS, Alternative surface water sources do not exist and extensive pollution of the ground water aquifiers exist; and

WHEREAS, Parker Lake has long been identified as a future source for municipal and industrial water for Wewoka and all of Seminole County;

NOW THEREFORE, BE IT RESOLVED, The City Council of the City of Wewoka asked that Congress authorize and fund the construction of Parker Lake as soon as possible.

PASSED AND APPROVED by the Mayor and City Council of Wewoka, Oklahoma, this 8th day of April, 1986.

Leodus Banks
Mayor

ATTEST:

City Clerk

RECEIVED
APR 11 1986
RedArk

RESOLUTION

WHEREAS, Parker Reservoir is going to be very vital for the future development of the industrial and economic base of Coal, Hughes, Pushmataha, and Pontotoc Counties; and

WHEREAS, the city of Ada is involved in lawsuits now opposing its water rights from the Arbuckle Aquifer, creating an insecure situation for its water rights; and

WHEREAS, the water supply to be developed from Parker Reservoir would be an excellent source of water for industrial development and back-up water for the Ada municipality, plus nine (9) rural water districts:

NOW, THEREFORE, BE IT RESOLVED by the City Council of the city of Ada, Oklahoma that the city of Ada wishes to express its strong support for the Congress of the United States and the President to move ahead as quickly as possible to fund and build Parker Reservoir.

Dated this 7th day of April, 1986.

CITY OF ADA

Mayor

ATTEST:

City Clerk

(SEAL)

Mr. PAYNE. Thank you.

Mr. Chairman and members of the committee, I am Tom Payne, and I am from McAlester, Oklahoma, which is in Pittsburg County. I represent the Poteau/Deep Fork Association as a board member of that organization. It is a voluntary citizens' group supporting water development and other natural resource development in a 10-county area of Southeastern Oklahoma. It is impacted by the Poteau and Deep Fork Rivers.

These 10 counties have a combined population of almost 1 million people. The Poteau/Deep Fork Association was formed for the purpose of promoting the orderly development of water and natural resources in two of these river basins.

Mr. Chairman, I grew up on the banks of one of these rivers, the Deep Fork River. I grew up in Okmulgee, a small town just north of Pittsburg County. I am well familiar with the river of which I speak. I fished off the banks; caught soft-shell turtles, needle-nose gar, et cetera. I grew up that way.

The Deep Fork River is a tributary of the Canadian River, one of our major rivers in Oklahoma, forming one of the major arms of Lake Eufaula, and the existing Corps of Engineers multi-purpose project. It empties into the existing McClellan and Kerr Navigation Channel on the Arkansas River.

Just three things. The Deep Fork originates in the central part of Oklahoma, basically what I call a slue or a swamp situation. By the way, that is close to our capital, Oklahoma City. It is approximately 220 river miles long, an average fall of 2 feet per mile. That is probably not much more fall than this floor has; extremely shallow fall for such a long travel.

Flooding, of course, in this river is almost yearly. Probably right now it is on its way out of the banks due to the rains we have had. Of course, I witnessed that as a youngster growing up, the flood problems we had from that river.

Also, it annually ruins crops in this whole area of watershed, averaging hundreds of thousands of dollars in damage. No one has been brave enough to do a lot of planting in there for fear of the flood problem which could occur.

The Deep Fork is a lazy, slow, excessively wet area flooded many months of the year.

The Poteau River, on the other hand, drains an area of about 1,900 square miles in Eastern Oklahoma and Western Arkansas. Some of the exciting points of this river are that there are approximately 3 billion tons of coal reserves in this area located in the basin, and they are being mined at increasing rates, even recently.

In addition, there are approximately a million or more bushels of soybeans produced each year in this same area.

Expanding industrial activity in the basin, especially near Fort Smith, Arkansas, and in Le Fleur County, are placing an increased demand on this area's ability to provide an ample quantity and quality of municipal and industrial water. In fact, three major industrial facilities have moved to Le Fleur County this year, one a cogeneration plant, to initially employ 1,200 people during a four-year construction period; and then following, 130 people for the life of the plant.

We are excited about that. This plant will consume approximately 1 million tons of coal per year for our area. The facility will house a CO2 plant and a paper recycling plant.

Now, navigation in the Poteau/Deep Fork is not really a new concept as we may have already discussed. It was championed in the late Fifties by the late Senator Robert S. Kerr as an original part of the McClellan and Kerr Navigation System to serve the major industrial center of Oklahoma City and the vast agricultural region that we have there. Western Oklahoma is included.

The Poteau/Deep Fork Association would like to see, along with this entire area, a multi-purpose navigation flood control recreation and water supply system extending all the way to the State capitol in Oklahoma City. This is our goal and our dream.

To maximize the potential of this water resource, we must quit looking at the single-purpose projects and consider it from a multipurpose standpoint. This multi-purpose approach would include ways of combining navigation, water supply, as well as other purposes such as hydropower, recreation, flood control and, in fact, municipal water transmission.

In closing, I would like to say that several efforts are underway in the Poteau/Deep Fork Association area to develop solutions for these problems. The resolutions included in our written testimony which you have represent the Poteau/Deep Fork Association's position regarding each of these efforts.

The membership of the Poteau/Deep Fork Association respectfully asks that your subcommittee honor the request contained in these resolutions.

I thank you personally for your time and your attention in allowing me to testify. Thank you.

Mr. BEVILL. Thank you.

Mr. BOLLINGER. Mr. Chairman, the next group we would like to hear from is the East Central Water Association, and I would like to give you just a little general information about that before we have each of the speakers that represent the various counties talk.

The East Central Association is a citizens' group, serving five counties in the district. This area is the fastest growing area of the Third Congressional District, and yet there is not an existing, under construction or authorized, Bureau or Corps project in the entire area. There is really not any significant surface water in the area.

The groundwater is being polluted; it has become a problem. It is also true that we are losing both the quantity and quality of the groundwater table, in essence.

The area had a study underway that the Bureau was conducting, and it is two-thirds completed. This year, there were no funds included in the budget for that.

Also, the Congressman mentioned Parker Lake, and we feel that we had direction from Congress with the authorization of Parker Lake, and OMB has determined that there is no Federal interest. And it seems they have a problem understanding who should be telling who what to do, in our opinion. We feel Congress should tell them what to do—not them tell the Corps what to do.

As a result, the Corps had been working on the continuing planning and engineering process of finalizing their plans on Parker

Lake, and again that is almost 75 percent complete, but because of OMB's determination of no Federal interest they have now decided not to include additional funds in that area.

The following speakers will, I think, illustrate to you why we feel that Parker is important, why we feel that the study to find out what the answer is after Parker is also important; and we feel that we don't get our total investment if we don't complete these studies. There is no reason to stop them in midstream.

The first person we would like to hear from is Beverly Rodgers, Mayor of Holdenville, Oklahoma, and representing Holdenville and Hughes County.

Ms. RODGERS. Mr. Chairman, members of the committee, thank you for the opportunity to speak to you today about some of the problems facing the people of Holdenville and Hughes County.

My name is Beverly Rodgers, the Mayor of Holdenville, which is the county seat of Hughes County, Oklahoma.

The East Central Water Study and Parker Lake are keys, I believe, to the future development of Hughes County. We think we can grow and become a more viable member of this family of States. Without it, we could become a burden of greater proportion.

Parker Lake and the East Central Water Study will benefit the county in areas of municipal and industrial water supplies, and in the area of economic development.

Several times in the past years Holdenville has had a water shortage problem. The alternative water supply we looked towards was denied to us by the Oklahoma Department of Health in the State, due to its high salt content from upstream contamination.

We, in Hughes County, currently supply three rural water districts with two more contracted for future supplies. During dry periods, we have had to turn off water supplies to these rural water districts; and, additionally, we have had to ration water usage within our industry. We need a supplemental supply if we, in Hughes County, are to grow to become self-supporting communities.

We recently had an industry looking at a site in Hughes County for development. However, they needed a large supply of water. I told them I could not promise an unlimited supply of water to them until Parker Lake was completed.

With the February data report from the Oklahoma State Employment Security Commission, Hughes County presently stands at 17 percent unemployment, more than twice the national average. Hughes County has consistently ranked in the top 5 within the State as far as unemployment. So, to turn away an industrial prospect such as the one we talked to, away from Hughes County, is like having to nail another nail in our coffin.

The construction and operation of Parker Lake would be a boost to the economic development of Hughes County. People from Hughes County and surrounding areas will be employed. Additionally, sales in the area would be boosted through the tourism aspect of the lake.

Mr. Chairman, I fear that without the construction of the whole Parker project, Holdenville and Hughes County will be coming to you in the future for just the barest of necessities to get by with.

With the construction, we will be able to look out for ourselves and our neighbors for the future.

We only ask that you recognize Hughes County as a part of this great nation and as an equal member deserving to be treated as others. If you demand that we pay up front our share of the cost of the project, you are putting your foot on our hands as we hang on the ledge of survival.

We, rather, ask of you your hand to help us pull ourselves up out of the depression we battle daily.

Municipal water supply, industrial water supply, economic development—I believe these are three good reasons the East Central Water Study and Parker Lake should be among the projects you fund this coming year.

Sincerely, we thank you for your time and consideration of this project.

Mr. **Bevill**. Very good.

Mr. **Bollinger**. Mr. Chairman, Ron Bourbeau is the City Manager of the City of Shawnee, Oklahoma.

Ron.

Mr. **Bourbeau**. Mr. Chairman, it is good to talk to you again this year about what is becoming our favorite subject.

I am Ron Bourbeau, and I am the City Manager of Shawnee, Oklahoma, which is in Pottawatomie County. Our area has suffered, in the last few years, water shortages which necessitated the rationing of water.

The city provides treated water to city citizens as well as rural water districts within our county through bulk sales contracts that we have. These contracts are to get the Farmers Home loans to build the systems—they had to have long-range contracts to amortize the system. We have a responsibility to them as well as to our citizens for potable water for residential use, sanitary use, and fire protection. We have agreed to provide support for the county residents for these same purposes on a long-range basis.

We also have a responsibility to serve the industrial customers who provide support for the water utility and who provide the jobs for our citizens, both in the city and in the county.

In the current stressful economic situation in rural Oklahoma, support of local industry and other water-dependent economic activities is crucial to our survival. We are bending every effort to expand employment opportunities, and providing a reliable long-term source of water is a key requirement.

The City of Shawnee, and Pottawatomie County, have investigated alternatives by which to give residents and industrial customers the assurance of reliable support. In reaction to a shortage of rainfall and resulting water rationing, we have built a $2 million pipeline to enable us to supplement our raw water by purchasing the excess water pumped from Lake Atoka to Oklahoma City. This is only their surface water, so it isn't anything that we can rely on.

This deals with our short-term requirements. The price of using this alternative is high since the cost of that raw water is equal to the cost of treated delivered water now, so it effectively doubles the price of water to our customers.

Obviously, this short-range approach is not really tolerable but, rather, just a Band-Aid to get us by.

In the mid-range, we have addressed the need with the Deer Creek Reservoir, which you undoubtedly are familiar with. But that will be both expensive, in the sense that the total capacity of it provides our current average daily use, so it doesn't really provide much of a long-range solution for us, and that investment has to be amortized out rather quickly.

In the long-term, it is inadequate to serve both residential customers as well as industry or commercial job generators, which we see as the water resource provider.

As has been recognized in testimony over the last decade, the long-range solution is Parker Reservoir, for Shawnee, Pottawatomie County, and other parts of Southeastern Oklahoma.

We are here to reaffirm the need for that project and testify to the importance for economic development that is needed now more than any time in the last 30 years, and to ask for your support for this vital project.

Thank you.

Mr. Bevill. Yes.

Mr. Bollinger. Mr. Chairman, the Mayor from the City of Wewoka was unable to be with us today, and he did ask that I read a resolution that they had passed just in the last City Council meeting. This is one of several that they have done that reaffirms their commitment to Parker Lake.

"Whereas, the City of Wewoka, with a population of 5,480, serves as the county seat of Seminole County, which has a population of 27,473; and

"Whereas, the City of Wewoka has the responsibility to provide water for the residential, commercial and industrial needs of its citizens and, in addition, is the source of water for three rural water systems; and

"Whereas, the City of Wewoka and the entire County of Seminole have for several years experienced both quality and quantity problems with its existing water suppliers; and

"Whereas, alternative surface water sources do not exist and extensive pollution of the groundwater aquifiers exist; and

"Whereas, Parker Lake has long been identified as a future source for municipal and industrial water for Wewoka and all of Seminole County;

"Now, therefore, be it resolved, the City Council of the City of Wewoka asked that Congress authorize and fund the construction of Parker Lake as soon as possible.

"Passed and approved by the Mayor and City Council of Wewoka, Oklahoma, this 8th day of April, 1986.

"Leodus Banks, Mayor.

"Attest: Karen Johnson, City Clerk."

Our next speaker is Leonard Briley of Ada, Oklahoma.

Mr. Briley. Thank you, Mr. Chairman and members of the committee.

I am Leonard Briley, City Manager of the City of Ada, Oklahoma and also Chairman of the East Central Water Association.

As Chairman of the Association, I would like to encourage continuation of the study for complete water resource development of our association area.

Water is one of our greatest natural resources, and it is necessary for us to develop it to its fullest potential in order for us to develop our other resources to their potential.

I have a few things to submit for the record, and I will just talk for a few minutes.

The City of Ada serves approximately 30,000 people in our area of Ada, Oklahoma, and a medical center and several other facets.

Like all the other counties around us, our young people are migrating out, consequently leaving behind senior citizens on fixed incomes.

This up-front financing will just tear us apart. We just can't stand that. We can pay these projects out over a period of time, but the up-front financing would hurt us badly.

We furnish rural residents of our county water from the Arbuckle Aquifer and our own city. We were contested in district court in Coal County for our water rights there and we lost the first battle. We appealed to the Supreme Court, but that court case is still pending, and we have not had a decision handed down to us.

If we happen to lose that case we are going to be in dire trouble, but even if we win it, it is still not a real stable source of water for the City of Ada and all of the activities that we carry on there in economic development.

So, we need the Parker Reservoir as a back-up.

I hope that the conference committee members of the House will really stand firm and try to get a distribution system in there, too, because there are so many of us that are going to be participating in this project.

To get that treatment plant and distribution system built with all of the entities participating is going to be next to impossible.

So, it really needs to be a part of this project otherwise it will be a lake sitting there with $40 million invested in it that hardly any of us could use.

So, these are just a few brief points I wanted to touch on.

Thank you for hearing me out.

[The statement of Leonard Briley follows:]

TESTOMONY GIVEN BEFORE
THE APPROPRIATION COMMITTEE
SUB-COMMITTEE ON ENERGY AND WATER DEVELOPMENT

Monday, April 14, 1986

Mr. Chairman and members of the Committee, I'm Leonard Briley, City Manager of the city of Ada, Oklahoma and also Chairman of the East Central Water Association. As Chairman of the Association, I would like to encourage continuation of the study for complete water resource development of our association area. Water is one of our greatest natural resources and it is necessary for us to develop it to its fullest potential in order for us to develop our other resources to their potential. ①

I am sure you have been made aware of the fact that our area has been heavily dependent upon energy and agriculture for its economic base. These industries have been devastated recently by over production and bad policy at the national level. Consequently, we have a terrible out migration of our young, educated, intelligent, productive and very talented people, adding to poverty conditions that already existed in our area. We are begging and pleading for your help to get our water resources study moving again. We need your assistance. Our poor economic base will not allow our development of these resources on our own. However, we do have a great desire to help ourselves. You can help us by giving us the opportunity to help ourselves.

The city of Ada not only provides water for its city residents, but also to the entire populous of Pontotoc County through nine (9) rural water districts. Since the beginning of its history, Ada has received its water from a spring and wells from the Arbuckle Aquifer some eleven and one-half miles south of Ada. We have had our water rights challenged in court and lost the first round in district court. We appealed to the Supreme Court of Oklahoma. A decision has not been handed down. Even if we get a favorable decision, we still have potential ground water pollution and need desperately a back-up source. We also need industrial development water. We have invested heavily in industrial parks and infrastructure, transportation, medical facilities, and education to make our city and county ready for industrial and economic development, but without additional sources of water, we cannot hope to get the private investment in our area that is needed. Parker Reservoir is desperately needed along with treatment and distribution. A reasonable method of payback is also a must.

While the economic condition of Pontotoc County is very depressed, counties all around us are depressed even more with higher unemployment, less family income, and a very high percentage of senior citizens.

I will not read the resolution, but have included a copy for the record that the city of Ada City Council passed last Monday evening for me to bring as their message to you. Thank you for your time and consideration.

Mr. **Bollinger**. Mr. Chairman, I believe you can begin to understand why we feel Parker Lake is tremendously important to our part of the State and to the many cities and areas of the county, especially these five counties.

OMB indicated it was a project of the city of Oklahoma City, therefore they could build it. If it was a project for them, they probably could, but it is not a project for them. It is a project for rural cities and counties in Oklahoma, and we cannot develop either, as Oklahoma City could.

Before we leave that particular area, I would like for the record to indicate that councilwoman Jacqueline Patterson from Wewoka is here.

I didn't realize she had slipped in on us. Glad to see you made it.

She is one of the councilwomen that serve with Mayor Banks of the City of Wewoka. We appreciate her being able to be with us today.

Our last speaker is William Chapman. He is an attorney and rancher and represents the Oklahoma Delegation of the Red River Valley Association.

Mr. **Chapman**. Mr. Chairman, members of the committee and staff, it is an honor and privilege to be here again this year to speak before your group as a life-long resident of the Red River Valley, and also because approximately half of Oklahoma lies within the basin of the Red River Valley.

It is extremely important to us as a State, and to me as an individual, to see that our natural resources are properly developed and utilized.

In light of that, I wanted to summarize several points that will be included in my portion of the written testimony today.

I would only care to take enough time to hit them lightly for you, if I might.

First in that line, the Corps of Engineers during Fiscal Year 1986 received funding for three hydropower projects.

This was for study to include hydropower as a project purpose in three of these lakes. Two of the lakes have already been built. The third one is authorized but has not begun construction yet.

Although the money provided in Fiscal Year 1986 was provided in 1986, they are not scheduled to be finished with this money, and the project was to go on.

However, under the projected budget of the Corps of Engineers, two of these projects are not being funded for 1987 according to their budget that is proposed.

We simply feel this would be a significant waste of already invested resources to not continue and finish these two studies for the amount of money that it would take to do so, and we would urge the subcommittee to look at that closely and, if possible, to see to it that these three studies are completed.

Next, McGee Creek is the only project under construction in Oklahoma in the Red River Valley. It is nearing completion and is scheduled for completion in Fiscal Year 1988.

In order to keep this project on track and to be finished, we are asking that $7,755,000 be provided to continue this project in Fiscal Year 1987.

The second lake I would like to discuss is Sardis Lake. This lake was a Corps of Engineers project. It was officially dedicated in June 1983.

Although authorized at full Federal expense, there was $2.4 million worth of recreational facilities that were never constructed.

Without these facilities, the recreational benefits that were originally envisioned when the project was authorized cannot be achieved and we are, therefore, asking Congress, if they could, to provide $500,000 of funds this year at full Federal expense to accomplish the additional recreational development that was originally planned and authorized.

The last point that I would like to cover is the on-going effort that is extremely important to Oklahoma, and that is the continuation of the Red River Basin comprehensive study.

The feasibility studies for the Oklahoma study are under way at full Federal expense as directed by Congress and are scheduled for completion in March of 1989.

We understand that the Corps of Engineers has testified before Congress that if it was to receive its full capability for Fiscal Year 1987 that it could accelerate the completion date to October 1988.

Therefore, we would like to request that Congress provide that capability in the amount of $1,150,000 in Fiscal Year 1987.

We thank you very much. I thank you very much for the time, for your past consideration and future consideration on our projects in our area.

Thank you.

Mr. BEVILL. Well, we certainly appreciate the fine statements that each of you have made and presented.

You have some very fine projects. As a matter of fact, I know first hand so many of them there, because Congressman Watkins has seen to it that I saw them and also that I saw the need.

This committee, of course, will be working very closely with Congressman Watkins on these, and I know that the committee wants to accommodate him in every way possible, because he is a very important part of this committee, and we are working with him, and we will do as much as we can to assist you on these projects.

Mr. WATKINS. Mr. Chairman, if I may, I want to say I appreciate you coming down there. I want to get John Myers from Indiana, my good friend, down there, because he lets me know every year that he hasn't been to Oklahoma yet.

I would like to point out to my colleagues—they hear these remarks, but I am glad you reemphasized them—the number one thing we want to do in that district is we want to build private sector jobs.

We don't want welfare. As the good mayor Beverly Rogers said, we have an area with 17 percent unemployment. They had an industry on the line, but she had to tell them she couldn't promise them that water, and with 17 percent unemployment they have driven that other nail in the coffin.

If we had jobs there we could solve a lot of the unemployment problems and also solve the welfare problem there.

That is close to an area where they had 52 jobs open up and 1,700 applicants for those 52 jobs. That is the kind of work force we have there.

In my home town of Ada, we have an emergency situation, because we are in a court case. If the Supreme Court rules against us, I don't know what kind of problem we are going to have.

This committee—and let me say this to all my good friends from my area—has passed it every time. We have passed Parker. We have sent it over there. We have not had the support in the Senate for these three times to get it signed off on and we could have had that underway now.

But now we have still more delay and more delay. I want to emphasize again that in Pottawatomie, my county, every entity there has a water problem, every single rural water district, every community there.

And in one area this summer we are opening up out of Earl's rural water district into a rural area, the first time many of these people have water.

They have been carrying water for over 25 years, but we are dependent on water from Oklahoma City. We are at their mercy.

They can cut us off any day. They don't have any real concern about that little rural area out there.

So, we could be cut off. I want to express to you my appreciation, especially for Mr. Bevill and Mr. Myers, because they are also here at these hearings. They hear me preach the gospel day in and day out.

But let me tell you, John, and Mr. Chairman, in my home town of Ada today, they called and wanted to know, would there be a way we could get on satellite T.V., because they wanted, two or three hundred of them, to assemble in our home town to hear this testimony and the response back and forth.

They are that concerned. They wanted to try to be a part of this hearing here today in some way because they couldn't come. There is no way we could raise that much money.

Mr. MYERS. Why not videotape it?

Mr. WATKINS. Yes, and we could have put it on as a commercial. Maybe we will do that next year. We should have thought about that.

We could tape the entire hearing so they could take it back home.

Mr. MYERS. Next year when you come back we will tape it and send it back home.

Mr. WATKINS. That is what we will do.

Mr. MYERS. Presuming we are here.

Mr. WATKINS. But I want to thank the entire staff for putting up with me lots of times about trying to drive these points home, but I think these people have told the story a whole lot better than I.

Mr. MYERS. I don't know about that. This morning I gave credit to another member of Congress who appeared here with a group of his constituency.

He doesn't serve on this committee or the subcommittee, but I gave him the credit for being most persistent in Congress, because he calls every week or two.

However, I forgot about Wes. I will have to apologize and correct the record—second most persistent. Wes is the most persistent.

Mr. WATKINS. I would like to say I know you have a very important meeting, but at 6:00 o'clock all the Oklahomans here are having a reception for all the members and staff and you are invited, and we hope all of you can come by for a few minutes.

I know yours starts a little earlier than ours, so if you cannot make it we will understand.

Mr. **Myers**. I am going to watch and see if they drink water or mixed drinks. We drink water up in Indiana. We have too much water.

Mr. **Watkins**. If we had some water we would drink it, John.

Mr. **Myers**. You don't want your water shut off, and I am trying to get the water shut off at home. But I am going to watch and see what you folks drink tonight.

Mr. **Bevill**. That shows you that is a part of our big problem in the nation—you see too much water here and not enough water there, and as long as that situation exists, we have our work cut out for us, haven't we?

Mr. **Myers**. Yes, distribution, that is the problem.

Mr. **Bevill**. We thank each of you. We always look forward to your appearing here.

Mr. **Watkins**. This is a great group.

Mr. **Bevill**. They certainly are, and we will work with you.

Mr. **Myers**. Wes talks about you all the time.

Mr. **Bevill**. The hearing is adjourned until 9:55 in the morning.

[The statement of Mr. Edwards follows:]

MICKEY EDWARDS
FIFTH DISTRICT, OKLAHOMA

COMMITTEE:
APPROPRIATIONS
SUBCOMMITTEE ASSIGNMENTS:
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FOREIGN OPERATIONS

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April 16, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Tom:

Enclosed is a statement I am submitting for the record in support of Oklahoma water projects.

Whatever assistance you can provide in this regard will be most appreciated.

Sincerely,

Edwards

Mickey Edwards
Member of Congress

ME/ll

STATEMENT BY REPRESENTATIVE MICKEY EDWARDS BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT OF THE HOUSE COMMITTEE ON APPROPRIATIONS, APRIL 16, 1986

Mr. Chairman and Members of the Subcommittee, I would like to express my appreciation to the Subcommittee for your continued interest in flood control and water resource development in Oklahoma.

While I strongly support all the requested appropriations for Oklahoma, I would like to highlight those projects in the Fifth District, which I represent.

The largest project is Arcadia Lake, located in the metropolitan area of Oklahoma City and Edmond. The Corps of Engineers has requested $5.9 million in construction funds and $79,000 in operations and maintenance funds for FY87.

When completed, the project will provide flood control, water supply and recreational benefits to the surrounding areas. For example, some 43,000 acres of rural land, with properties valued at $73 million, will receive protection. A flood in April of 1985 caused an estimated $1.7 million in damages.

As one of the fastest growing cities in Oklahoma, Edmond has an urgent need for additional water supplies to supplement its present groundwater source. Arcadia Lake will yield approximately 11 million gallons of water a day.

The FY87 budget request also contains operations and maintenance funds for three other important projects in my district, which I support. They are: Copan Lake ($449,000), Hulah Lake ($543,000), and Kaw Lake ($1,332,000).

Mr. Chairman, the projects that I have touched upon all have a common objective: to help the people in communities throughout my district to help themselves. Each of these projects is essential to the well-being of the residents of these communities and each is a prudent expenditure of taxpayer funds.

I fully recognize the budget constraints under which the committee must operate again this year. But I also believe that the expenditure of funds for these projects represents an investment that will pay for itself several times over in terms of providing new water supplies, flood control and recreational benefits.

Let me again thank the subcommittee and urge you to support full funding of the FY87 budget request for these projects.

APR 26

MICKEY EDWARDS
FIFTH DISTRICT, OKLAHOMA

COMMITTEE
APPROPRIATIONS
SUBCOMMITTEE ASSIGNMENTS
MILITARY CONSTRUCTION
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VICKI LOVE MARTYAK
CHIEF OF STAFF

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April 24, 1986

The Hon. Tom Bevill,
Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
2362 Rayburn House Office Building
Washington, D. C. 20515

Dear Tom:

I am writing to supplement my testimony of April 16, in which I expressed support for water projects in Oklahoma. I would appreciate it if you would also include this letter in the record following that testimony.

The FY85 Energy and Water Development Appropriation bill reported by the committee, and which passed the House last year, contained $2.3 million for recreational facilities at Copan Lake, Oklahoma. This figure was cut back in conference to $1.25 million. During hearings on the FY87 budget, the Army Corps of Engineers indicated in response to a question by Mr. Watkins that the estimated cost for constructing the remaining recreational facilities at Copan Lake would be $3,000,000 but the most they could spend during FY87 would be $1.25 million.

Last year, our Appropriations Committee recognized the merits of this project by including the following language in its report: "The Committee feels that the Corps of Engineers should live up to its commitments to local sponsors and that the total costs of construction of recreational facilities be a Federal responsibility."

Therefore, I ask the committee to restore $1.25 million of the $1.75 million that was cut last year so that construction of recreation facilities at Copan Lake can proceed during FY87.

Sincerely,

Mickey Edwards

Mickey Edwards
Member of Congress

ME/11

TUESDAY, APRIL 15, 1986.

TOMBIGBEE RIVER VALLEY WATER MANAGEMENT DISTRICT

WITNESS

ROBERT S. WEIR, EXECUTIVE DIRECTOR

Mr. BEVILL. The committee will come to order.

Robert Weir, we are going to hear your testimony first, then we will get into the group.

Mr. Whitten hoped to be here at this time, but he is attending a Congressman's funeral in New York this morning. We would be glad to hear from you.

Mr. WEIR. Thank you, Mr. Chairman.

I appreciate the opportunity of being allowed to be here today. I am Robert Weir, with the Tombigbee River Valley Water Management District from the State of Mississippi.

I have filed for the record a written statement, which I will speak to a portion of that at this time.

The Tombigbee River Valley Water Management District was created for the purpose of developing and conserving the human and natural resources of our region of Mississippi. We represent 12 member counties located in Northeast Mississippi consisting of approximately 350,000 people; however, our projects may benefit a larger area and a considerably larger population.

Our agency has proudly served as the official sponsor to the U.S. Corps of Engineers in the construction of the Tennessee-Tombigbee Waterway. We consider this waterway a masterpiece of technology that was performed by the Corps. We continue to salute the Corps for a job well done.

Tombigbee River Valley Water Management District has also proudly served in the sponsorship of a great number of flood control projects and other water related projects that have resulted in considerable benefit to our area of the country.

Our goals are to continue addressing and resolving the needs of the people of our area. These benefits can become reality by assisting our farmers, landowners, and timber farmers in controlling damages to their lands through some type of water management program.

Many of our residences and businesses are experiencing such burdens of risk from uncontrolled flood waters, land erosions, soil deterioration, not mentioning property damage.

We must allow our people to operate under free enterprise and support them through extending some relief by reducing their burden of risk that may confront them.

One crucially needed project is the Luxapalila, a tributary of the Tombigbee River. Luxapalila originates in Alabama and flows through the metropolitan area of Columbus, Mississippi before emptying into the Tombigbee River. During flood season, many homes and businesses experience flooding which result in considerable damage to property. The risk of flooding creates additional expenses for all involved such as a loss of business, high premium for insurance coverage, loss of productivity and reduction of value to land.

The Corps and our agency have invested time, effort and expense in studying this problem. All studies have revealed that this project is very much a feasible one.

I hereby request that adequate appropriation be made for the continued study of this Luxapalila project.

We remain very optimistic about our economic and industrial development of the Tennessee-Tombigbee Waterway.

Northwest Mississippi's greatest export potential is in the agricultural production area. One of the leading commodities is forest products, such as chips, logs, timber and finished wood products; grain products, soybeans, and wheat.

A comprehensive water resource plan must be implemented to give relief to flood and drainage problems and soil erosion to agriculture and timber lands in the area. These problems must be addressed through de-snagging and channelization of its tributaries and watershed projects developed to curb problems created by rivers and creeks in the area that deprive our farmers of a considerable amount of farm land that could be utilized and benefit people throughout our Nation and world.

As we prepare for the future, we feel that such a comprehensive water management plan will not only be a relief to our farmers and landowners, but we can also utilize the surface water as a solution for our water source for our residents and industry. The results of several studies addressing the supply of our ground water indicate a crucial concern for potential industries in their consideration of locating or expanding in this area along with a similar concern by our residents of what the future may hold regarding this necessary commodity.

Our considerable amount of rainfall in this area can be converted into an asset through a retention program. Our ground water aquifers are decreasing at an alarming rate due to population and industrial growth. It is important that we continue to devote our efforts toward the conservation of our lands and natural resources.

We further feel that these necessary projects can only be accomplished with the continuing assistance of the U.S. Army Corps of Engineers and the U.S. Soil Conservation Service through the U.S. Department of Agriculture, along with numerous state and Federal agencies.

We recommend that funding for the full capabilities of these agencies be approved in order that we may immediately begin addressing these needs. Such request is made in reference to the following Authority: The Committee on Public Works and Transportation of the House of Representatives, United States, adopted a resolution, on September 19, 1984, that authorized and directed the Secretary of Agriculture to make joint investigations and surveys of the Tombigbee River Basin, Mississippi and Alabama, and Tuscumbia River Basin, Mississippi.

The investigation and survey results, in the interest of flood prevention and control, soil erosion and siltation control, water quality control, water supply, recreation, fish and wildlife, environmental quality, watershed protection and allied purposes, are to be in a report that will be prepared and submitted to the committee in compliance with the provisions of Public Law 639, 87th Congress.

Tombigbee River Valley Water Management District remains dedicated in the promotion of the Tennessee-Tombigbee Waterway to its greatest potential. Your support, along with your foresight, has played a vital role toward not only the future of our area, but for Mid-America. This we are grateful for.

Thank you, again, for allowing me to come.

[The statement of Robert S. Weir follows:]

COMMENTS SUBMITTED
AT
PUBLIC HEARINGS FOR FY 1987
APRIL 15, 1986

BEFORE

HOUSE APPROPRIATIONS SUB-COMMITTEE

ON

ENERGY AND WATER DEVELOPMENT

IN SUPPORT OF

TENNESSEE-TOMBIGBEE WATERWAY PROJECT

TOMBIGBEE RIVER & TRIBUTARIES
FLOOD CONTROL PROJECT

TOMBIGBEE RIVER BASIN, MISSISSIPPI AND ALABAMA,
AND TUSCUMBIA RIVER BASIN, MISSISSIPPI

SUBMITTED BY

ROBERT S. WEIR, EXECUTIVE DIRECTOR
TOMBIGBEE RIVER VALLEY WATER MANAGEMENT DISTRICT
TUPELO, MISSISSIPPI

SUMMARY

TENNESSEE-TOMBIGBEE WATERWAY PROJECT - PL 525, 79th CONGRESS
MISSISSIPPI AND ALABAMA

RECOMMENDING CONTINUED FUNDING THAT WILL ALLOW CONTINUED OPERATION AND MAINTENANCE OF THIS PROJECT TO THE FULL CAPABILITY OF THE CORPS OF ENGINEERS.

TOMBIGBEE RIVER AND TRIBUTARIES

FLOOD CONTROL PROJECT - PL 85-500, 85th CONGRESS
MISSISSIPPI AND ALABAMA

RECOMMENDING CONTINUED SUPPORT OF FLOOD CONTROL PROJECTS ON THE TOMBIGBEE RIVER AND TRIBUTARIES IN THE STATE OF MISSISSIPPI TO THE EXTENT OF THE CORPS OF ENGINEERS' FULL CAPABILITY.

TOMBIGBEE RIVER BASIN, MISSISSIPPI AND ALABAMA, AND TUSCUMBIA RIVER BASIN, MISSISSIPPI

FLOOD PREVENTION AND CONTROL, SOIL EROSION AND SILTATION CONTROL, WATER QUALITY CONTROL, WATER SUPPLY, RECREATION, FISH AND WILDLIFE, ENVIRONMENTAL QUALITY, WATERSHED PROTECTION AND ALLIED PURPOSES - RESOLUTION BY THE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION OF THE HOUSE OF REPRESENTATIVES, UNITED STATES OF AMERICA, ADOPTED SEPTEMBER 19, 1984.

RECOMMENDING FUNDING TO THE FULL CAPABILITIES OF THE U.S. ARMY CORPS OF ENGINEERS AND U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE.

STATEMENT OF ROBERT S. WEIR
EXECUTIVE DIRECTOR
TOMBIGBEE RIVER VALLEY WATER MANAGEMENT DISTRICT
BEFORE THE HOUSE AND SENATE
ENERGY AND WATER DEVELOPMENT APPROPRIATIONS SUB-COMMITTEES

April 15, 1986

The Tombigbee River Valley Water Management District was created for the purpose of developing and conserving the human and natural resources of our region of Mississippi. We represent twelve member counties located in Northeast Mississippi consisting of approximately 350,000 people; however, our projects may benefit a larger area and a considerable larger population.

Our agency has proudly served as the official sponsor to the U.S. Corps of Engineers in the construction of the Tennessee-Tombigbee Waterway. We consider this Waterway a masterpiece of technology that was performed by the Corps. We continue to salute the Corps for a job well done.

Tombigbee River Valley Water Management District has also proudly served in the sponsorship of a great number of flood control projects and other water related projects that have resulted in considerable benefit to our area of the country.

Our goals are to continue addressing and resolving the needs of the people of our area. These benefits can become reality by assisting our farmers, landowners, and timber farmers in controlling damages to their lands through some type of water management program.

Many of our residences and businesses are experiencing such burdens of risk from uncontrolled flood waters, land erosions, soil deterioration, not mentioning, property damage.

We must allow our people to operate under free enterprise and support them through extending some relief by reducing their burden of risk that may confront them.

One crucial needed project is the Luxapalila, a tributary of the Tombigbee River. Luxapalila originates in Alabama and flows through the metropolitan area of Columbus, Mississippi before emptying into the Tombigbee River. During flood season, many homes and businesses experience flooding which result in considerable damage to property. The risk of flooding creates additional expenses for all involved such as a loss of business, high premium for insurance coverage, loss of productivity and reduction of value to land.

The Corps and our agency have invested time, effort, and expense in studying this problem. All studies have revealed that this project is very much a feasible one.

I hereby request that adequate appropriation be made for the continued study of this Luxapalila Project.

We remain very optimistic about our economic and industrial development of the Tennessee-Tombigbee Waterway. Many existing Mississippi firms are becoming aware of the water borne freight rates and with this information are exploring the potential markets and opportunities in export in Mid-America.

Northeast Mississippi's greatest export potential is in the agricultural production area. One of the leading commodities is forest products such as chips, logs, timber and finished wood products; grain products, soybeans, and wheat.

We believe that if we can overcome problems of marketing of commodities, developing value added industry and generation of capital, Mississippi can receive benefits from the Tennessee-Tombigbee Waterway that can have great growth potentials. Although there are areas of concern, they are not impossible to acquire and develop. It is this area of concern that will allow local free enterprise to exercise its leadership. The Tennessee-Tombigbee Waterway will provide a laboratory of opportunities and experiences for the private investor.

A comprehensive water resource plan must be implemented to give relief to flood and drainage problems and soil erosion to agriculture and timber lands in the area. These problems must be addressed through de-snagging and channelization of its tributaries and watershed projects developed to curb problems created by rivers and creeks in the area that deprive our farmers of a considerable amount of farm land that could be utilized and benefit people throughout our nation and world.

As we prepare for the future, we feel that such a comprehensive water management plan will not only be a relief to our farmers and landowners, but we can also utilize the surface water as a solution for our water source for our residents and industry. The results of several studies addressing the supply of our ground water indicate a crucial concern for potential industries in their consideration of locating or expanding in this area along with a similar concern by our residents of what the future may hold regarding this necessary commodity.

Our considerable amount of rainfall in this area can be converted into an asset through a retention program. Our ground water aquifers are decreasing at an alarming rate due to population and industrial growth. It is important that we continue to devote our efforts toward the conservation of our lands and natural resources.

We further feel that these necessary projects can only be accomplished with the continuing assistance of the U.S. Army

Corps of Engineers and the U.S. Soil Conservation Service through the U.S. Department of Agriculture along with numerous state and Federal agencies. We recommend that funding for the full capabilities of these agencies be approved in order that we may immediately begin addressing these needs. Such request is made in reference to the following Authority: The Committee on Public Works and Transportation of the House of Representatives, United States, adopted a resolution, on September 19, 1984, that authorized and directed the Secretary of Agriculture to make joint investigations and surveys of the Tombigbee River Basin, Mississippi and Alabama, and Tuscumbia River Basin, Mississippi. The investigations and surveys results, in the interest of flood prevention and control, soil erosion and siltation control, water quality control, water supply, recreation, fish and wildlife, environmental quality, watershed protection and allied purposes, are to be in a report that will be prepared and submitted to the Committee in compliance with the provisions of Public Law 639, eighty-seventh Congress.

Tombigbee River Valley Water Management District remains dedicated in the promotion of the Tennessee-Tombigbee Waterway to its greatest potential. Your support along with your foresight has played a vital role toward not only the future of our area, but for Mid-America. This we are grateful for.

Mr. BEVILL. Thank you, Mr. Weir, for a very fine statement, and I concur with you. We keep getting these negative reports on Tombigbee, but from the same people that were opposed to the project ever being completed and ever being opened. So I think we will continue to hear that.

I get a monthly report from the Corps of Engineers, so I know what goes through there every month. It is not scheduled and it hasn't been scheduled for years to open until next September. Unfortunately we don't have the figures on those items shipped part of the way between the Tennessee-Tombigbee, but only those that go all the way through. With respect to international trade, we have had the biggest drop in history. We are importing $125 billion a year more than we are exporting for the first time in history.

I mention that because 80 percent of our exports go through our inland waterway system. It has got a great future. It is going to mean a lot, in my judgment, to the entire Nation. I think your statement is very appropriate.

Our Chairman, Congressman Jamie Whitten, has asked that I explain to you why he is not able to be here to submit his views and to request your help.

Jamie is attending the funeral of his close friend, Joe Addabbo, in New York. He is supposed to be back at 3:30 this afternoon.

As you know, Congressman Whitten spearheaded successful efforts in the House to have the Public Works authorization bill, H.R. 6, acknowledge that the Lower Mississippi River and its flood control problems were national problems in view of the fact that 41% of the entire continental United States, except Alaska, flows down the Mississippi and also that the Mississippi River development that was initially authorized in 1928 and, as amended, is one project. We defeated a proposed amendment which would have changed this concept.

He points out that our colleagues on the Senate side were unable, despite the support of many Senators, to get specific agreement. He asked that I urge you folks to do what you can to at least get the Senate to work this out in conference. There is no doubt in Chairman Whitten's mind that neither H.R. 6 nor S. 1567 change the law as it pertains to the MR&T project.

All of you know of our Chairman's continuing interest in flood control, public works and all the rest, particularly in the lower Mississippi area, and over the Nation. As he has so well said, "Whatever our problems are at home and abroad, we must protect and develop our own country for it is absolutely essential that we maintain a strong economy and public support and a base on which we can depend—our own country."

The Chairman expects to be back in time for the meeting tonight.

So we will put that in as part of the record there, and I am going to ask my good friend and colleague here, Ms. Lindy Boggs, to preside in my absence here for a short time. Ms. Boggs, as you know, is one of the most respected and effective members of the entire Congress, and I would go further, but I am biased because I have always thought so much of her anyway. We will ask you to preside, if you would.

TUESDAY, APRIL 15, 1986.

LOWER MISSISSIPPI VALLEY PROJECTS

WITNESSES

HON. BILL EMERSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

T.M. SIMMONS, CHAIRMAN, EXECUTIVE COMMITTEE, LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION; PRESIDENT, YAZOO-MISSISSIPPI DELTA LEVEE BOARD, CLARKSDALE, MS

LARRY D. DOWDY, MAINTENANCE SUPERVISOR, LITTLE RIVER DRAINAGE DISTRICT, CAPE GIRARDEAU, MO

NEWMAN BOLLS, CHIEF ENGINEER, MISSISSIPPI LEVEE BOARD, GREENVILLE, MS

CURTIS PATTERSON, ASSISTANT CHIEF ENGINEER FOR WATER RESOURCES, DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, BATON ROUGE, LA

Mrs. BOGGS [presiding]. Thank you so much, Mr. Chairman, for those very kind words. We are very pleased to have our colleague, Congressman Bill Emerson, with us, who is the President of the Mississippi Valley Flood Control Association. We are pleased to have your comments.

Mr. EMERSON. Thank you. We are grateful for the very fine statement the chairman made on behalf of Chairman Whitten, with which certainly you and I know all of us in the Lower Valley heartily and deeply concur.

I appreciate very much this chance to appear before your committee again today. In addition to representing the 8th District of Missouri, I also serve as President of the Lower Mississippi Valley Flood Control Association, and it is in that position that I am here today to introduce the speakers and to encourage you to give a high priority to their requests.

The Lower Mississippi Valley Flood Control Association has served the people in the Valley continuously for over 50 years. During those years they have appeared before this subcommittee to request appropriations for the Mississippi River and Tributaries project that was authorized by Congress in 1928. I do not need to tell the distinguished members of this subcommittee of the good that has been accomplished by this project. I would like to say that it would not have been so without the help of this group.

The Association comes before you today recognizing the responsibilities of this subcommittee and they endorse your efforts to provide the taxpayers' dollars in a manner that will do the most good for this nation. They will also be discussing serious problems that have appeared recently that may hinder or seriously delay the completion of the Mississippi River and Tributaries project.

I personally thank you for your time and consideration. It is my pleasure now to introduce to you the speakers in the order that they will appear: T.M. Simmons, Chairman, Executive Committee, Lower Mississippi Valley Flood Control Association; President, Yazoo-Mississippi Delta Levee Board, Clarksdale, Mississippi: Larry Dowdy, Maintenance Supervisor, Little River Drainage District, Cape Girardeau, Missouri: Newman Bolls, Chief Engineer, Mississippi Levee Board, Greenville, Mississippi: Arthur Theis, Deputy

Chief Engineer, Department of Transportation and Development, Baton Rouge, Louisiana.

I think Mr. Simmons is the first.

Mrs. BOGGS. Thank you so very much.

[The statement of Bill Emerson follows:]

STATEMENT OF CONGRESSMAN BILL EMERSON, CONGRESSMAN FROM THE 8TH DISTRICT OF MISSOURI

I appreciate very much the opportunity to appear before you again today. In addition to representing the 8th District of Missouri, I also serve as President of the Lower Mississippi Valley Flood Control Association and it is in that position that I am here today to introduce the speakers and to encourage you to give a high priority to their requests

The Lower Mississippi Valley Flood Control Association has served the people in the Valley continuously for over 50 years. During those years they have appeared before this Subcommittee to request appropriations for the Mississippi River and Tributaries Project that was authorized by the Congress in 1928. I do not need to tell the distinguished members of this Subcommittee of the good that has been accomplished by this Project, I would like to say that it would not have been so without the help of this group.

The Association comes before you today recognizing the responsibilities of this Subcommittee and they endorse your efforts to provide the taxpayer's dollars in a manner that will do the most good for this Nation. They will also be discussing serious problems that have appeared recently that may binder or seriously delay the completion of the Mississippi River and Tributaries Project.

I personally thank you for your time and consideration. It is my pleasure now to introduce to you the Speakers in the order that they will appear: T.M. Simmons, Chairman, Executive Committee, Lower Mississippi Valley Flood Control Association; President, Yazoo-Mississippi Delta Levee Board, Clarksdale, Mississippi: Larry Dowdy, Maintenance Supervisor, Little River Drainage District, Cape Girardeau, Missouri: Newman Bolls, Chief Engineer, Mississippi Levee Board, Greenville, Mississippi: Arthur Theis, Deputy Chief Engineer, Department of Transportation and Development, Baton Rouge, Louisiana.

Mrs. BOGGS. Mr. Simmons.

Mr. SIMMONS. Madam Chairman and members of the committee, my name is Mark Simmons. I am the President of the Yazoo-Mississippi Delta Levee Board of Clarksdale, Mississippi. I also serve as Chairman of the Executive Committee of the Lower Mississippi Valley Flood Control Association, and it is in that capacity that I appear before you today. Our Association has been serving the people of the Lower Mississippi Valley continuously for over 50 years, and today we will again be addressing problems concerning the Mississippi River and Tributaries project. I will present several items of general interest to all our membership and then call on others of our group to testify concerning specific items. Madam Chairman, I assure you we will be as brief as possible.

As I am sure each member of the committee is aware, our Association is composed of the public bodies having local responsibility for flood control, navigation and related work in the seven states lying in whole or in part in the Lower Mississippi Valley and this large group contains representatives from each of those states.

We want to take this occasion to express to the committee our gratitude for the uniformly kind consideration you have given our requests in the past. Your understanding of the problems of the Lower Mississippi River has made it possible for much progress in recent years in protecting the people and property in the approximately 30,000 square mile area encompassed in the Valley.

We in the Lower Mississippi Valley are ever aware that Federal participation in flood control and related programs all began in our area. We are conscious of the fact that it was the Congress in 1928 which furnished the leadership that gave birth to our program. We know that as our own project grew and the need for similar programs in the rest of the nation became evident, it was the Congress which had the vision and determination which brought it to reality. We are convinced that the progress we are making today is largely because of the enlightened leadership of this committee. We are proud that among you are some of our very own.

It is difficult to recall almost 60 years ago the Mississippi Valley was in the midst of the greatest disasters ever visited on this nation. The direct loss of life was appalling. The indirect loss was never fully accounted for. In turn, the property damage measured in today's dollars, the direct loss and indirect loss, ran into the billions. There are hundreds of acres of once fertile land still untillable because of the sand deposits left in the levee.

There was not East-West commerce across the nation south of St. Louis. Transportation within the Valley was nonexistent except by water. Communications were all but nonexistent. The tent cities, the hunger, the disease and the misery which existed from Caira to the Gulf of Mexico should always remain etched in the history of this nation.

Out of this came a widely conceived engineering plan designed to prevent such an occurrence again. We are grateful that in the years since there has been developed the Mississippi River Tributary project which has paid rich dividends to the Federal Government and allowed us to pursue life in reasonable safety and prosperity. At this time the project showed an overall benefit-to-cost ratio of almost eight to one, which in itself is graphic proof of the undertaking.

Over the years, the project has prevented damages estimated at $100 billion. We believe the project for flood control is one of the best investments the Federal Government and our members together have ever made. Last year I expressed to this committee our concern about cost sharing for the Corps of Engineers' water projects. Today, as this group appears before you, our concerns have grown, and we are uncertain as to the possibility of completing the Mississippi River Tributary project.

We are faced with differing definitions of very important phrases used in legislation that has now passed both Houses of Congress. We do not have definitive knowledge of what work will be projected to cost sharing. We have the Executive Branch letting vital flood control contracts within days of award. We read where the administration is directing the Corps of Engineers to apply construction cost sharing provisions to construction contracts awarded after a given date, even though we have no law to that effect.

We have been told that only those portions of the Mississippi River and Tributaries project that are included, and I quote, "on schedule, balance to complete," the category will be subjected to cost sharing, but we can find absolutely no word in either the House or Senate bill that supports or even mentions such a premise, nor can we find any consistencies or equality in what portions are determined to fall into this very strange unscheduled category.

Even with the confusion and conflict, this Association, which represents the vast majority of the non-Federal interest in the Lower Mississippi Valley, believes it is certain the cost sharing requirements recently approved by the United States Senate will seriously hamper, if not completely stop, flood control and harbor projects in the Valley.

With this combination of confusion and knowledge, and with every consideration being given to the nation's overall budgetary situation we have spent considerable time and effort attempting to arrive at the most reasonable and pertinent request for fiscal year 1987 for the Mississippi Rivers and Tributaries project.

As a result of our discussions and deliberations, we are here today to ask your consideration of an appropriation of $324,384,000 for work we believe necessary during fiscal year 1987. Our request compares with a budget estimate of $298 million and is about $34 million less than what we understand is the capability of the Corps of Engineers. You will find attached to the prepared statement I have submitted a tabulation showing the details of our request.

I would like to call the committee's attention to the studies for Bushley Bayou and Larto Lake-Saline Lake in Louisiana that were funded in the fiscal year 1987 budget for a total amount of $266,000. This Association, with considerations given to the attitudes and financial situations of the local interests, believes it would be totally unwise to spend additional funds on these two items on which some phase of study has been conducted for many years, therefore we are requesting that no funds be appropriated for these studies in fiscal year 1987. We are requesting that the Corps of Engineers capabilities for the Eastern Rapides and South Central Avoyelles Parish, Louisiana and the Lower White River, Big Creek and Tributaries, Arkansas studies be appropriated.

I would also like to mention that we have requested additional funds to be used for construction in the St. Francis Basin, the West Tennessee Tributaries project, channel improvements on the Mississippi River and, of course, the Mississippi River levees which remain our first line of defense.

It is horrible to contemplate the loss of life and damage that would result in a time of extreme high water should failure occur in this system.

As responsible local officials, we recognize your responsibility to appropriate public funds in a careful and prudent manner. As individual taxpayers, we heartily endorse your efforts to provide the most economical government possible. We believe our askings will reflect this point of view.

We are grateful to the Appropriations Committees, both in the House and Senate, for their recognition over the years of the necessity to provide for the Mississippi River and Tributaries project.

Madam Chairman, we have one other request. Since we have several different definitions for separable elements of a project, and because of its importance to us, we would like to request we be allowed to place our definition into the record. Our definition of a separable element is that portion of a project that is not required to make the comprehensive project function efficiently or effectively. No economic benefits are derived.

Madam Chairman, with your permission, we will proceed with our other witnesses, and we appreciate the committee's patience. Thank you.

[The statement of T.M. Simmons follows:]

STATEMENT OF T.M. SIMMONS

PRESIDENT, YAZOO-MISSISSIPPI DELTA LEVEE BOARD, CLARKSDALE, MISSISSIPPI

and

CHAIRMAN, EXECUTIVE COMMITTEE,

LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

GENERAL SPOKESMAN

ON BEHALF OF APPROPRIATIONS FOR FLOOD CONTROL,
MISSISSIPPI RIVER AND TRIBUTARIES PROJECT
REQUESTING FISCAL YEAR 1987 APPROPRIATION

IN THE AMOUNT OF $324,384,000

STATEMENT

BY

MR. T.M. SIMMONS

GENERAL SPOKESMAN FOR THE

LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

Mr. Chairman and Members of the Committee, my name is Mark Simmons. I am the President of the Yazoo-Mississippi Delta Levee Board of Clarksdale, Mississippi. I also serve as Chairman of the Executive Committee of the Lower Mississippi Valley Flood Control Association and it is in that capacity that I appear before you today. Our Association has been serving the people of the Lower Mississippi Valley continuously for over 50 years, and today we will again be addressing problems concerning the Mississippi River and Tributaries Project. I will present several items of general interest to all our membership and then call on others of our group to testify concerning specific items. Mr. Chairman, I assure you we will be as brief as possible.

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As a result of our discussions and deliberations, we are here today to ask your consideration of an appropriation of $324,384,000 for work we believe necessary during Fiscal Year 1987. Our request compares with a Budget Estimate of $298,000,000 and is about $34 million less than what we understand is the capability of the Corps of Engineers. You will find attached to the prepared statement I have submitted a tabulation showing the details of our request.

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We are grateful to the Appropriations Committees, both in the House and Senate, for their recognition over the years of the necessity to provide for the Mississippi River and Tributaries Project.

Mr. Chairman, with your permission, we will proceed with our other witnesses. We appreciate very much the Committee's patience.

LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

FISCAL YEAR 1987 CIVIL WORKS REQUEST

MISSISSIPPI RIVER AND TRIBUTARIES APPROPRIATION

PROJECT AND STATE	FISCAL YEAR 1987 BUDGET	LMVFCA REQUEST FISCAL YEAR 1987
SURVEYS, CONTINUATION OF PLANNING & ENGINEERING & ADVANCE ENGINEERING & DESIGN		
Bayou DuChien, KY	243,000	243,000
St. John's Bayou & New Madrid Floodway, MO	428,000	428,000
Eastern AR Region Comprehensive Study	700,000	700,000
Yazoo River Basin, MS	500,000	500,000
L'Anguille River Basin, AR	655,000	655,000
Atchafalaya Basin (Water & Land Resources), LA	170,000	170,000
Boeuf-Tensas Basin, LA & AR	950,000	950,000
MS & LA Estuarine Areas, LA & MS	780,000	780,000
Nonconnah Creek, TN & MS	800,000	800,000
Reelfoot Lake, TN	260,000	260,000
Tiptonville, TN	105,000	105,000
Bushley Bayou, LA	150,000	-0-
Larto Lake-Saline Lake, LA	116,000	-0-
Eastern Rapides & South Central Avoyelles Parishes, LA	935,000	1,250,000
Collection and Study of Basin Data	270,000	270,000
Lower White River, AR (Big Creek & Tributaries)	-0-	300,000
SUBTOTAL-SURVEYS, CONTINUATION OF PLANNING & ENGINEERING & ADVANCE ENGINEERING & DESIGN	$7,062,000	$7,411,000
CONSTRUCTION		
St. Francis River Basin, MO & AR	9,200,000	11,750,000
Eight Mile Creek, AR	350,000	350,000
West Tennessee Tributaries, TN	5,500,000	8,585,000
West Kentucky Tributaries, KY	100,000	100,000
Yazoo Basin, MS	24,000,000	24,000,000
Sardis Lake (Dam Safety Assurance), MS	3,500,000	3,500,000
Atchafalaya Basin, LA	35,600,000	35,600,000
Atchafalaya Basin Floodway System, LA	970,000	970,000
Bayou Cocodrie & Tribs., LA	75,000	75,000
Old River, LA	14,829,000	14,829,000
Tensas Basin, AR & LA	5,600,000	5,600,000
Channel Improvement, IL, KY, MO, AR, TN, MS & LA	75,100,000	93,000,000
Mississippi River Levees, IL, KY, MO, AR, TN, MS & LA	21,700,000	24,200,000
SUBTOTAL-CONSTRUCTION	$196,524,000	$222,559,000
REDUCTION FOR SAVINGS & SLIPPAGE	- 10,427,000	- 10,427,000
OPERATION AND MAINTENANCE - SUBTOTAL	$104,841,000	$104,841,000
GRAND TOTAL - MISSISSIPPI RIVER AND TRIBUTARIES	$298,000,000	$324,384,000

Mrs. BOGGS. We thank you very much. We are pleased with your testimony and especially grateful to you for giving a true definition of the separable elements situation, something that we certainly are not recalling anywhere else. We are grateful to you for that input. We are very pleased to have you with us.

Mr. EMERSON. Mr. Dowdy.

Mr. DOWDY. My name is Larry D. Dowdy. I live in Cape Girardeau, Missouri and serve as Maintenance Supervisor for the Little River Drainage District of Southeast Missouri. My testimony will relate specifically to fiscal year 1987 appropriations and for the St. Francis Basin project of the Mississippi River and Tributaries project.

I am testifying today on behalf of levee and drainage districts within the St. Francis Basin project in Southeast Missouri and Northeast Arkansas. Most of these locally tax funded and operated drainage and levee districts are dependent upon others for their outlets into the St. Francis and Mississippi Rivers.

Our request is $11,750,000 for construction in the St. Francis Basin project, which is the Corps capability. Also $3,719,000 is in the fiscal year 1987 budget for operations and maintenance, which is $1,812,000 less than the Corps capabilities. These amounts are supported by our district and association and do reflect a slight increase above the fiscal year 1986 appropriation. You will note that in the overall Mississippi River and Tributaries budget the construction moneys exceed the planning moneys by a good amount, which we consider a good and workable difference. This is some change from past years which we have addressed before. We thank this committee for their support in correcting the past imbalances of construction versus planning and design moneys.

We thank the committee for the opportunity to appear before you today.

[The statement of Larry D. Dowdy follows:]

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CAPE GIRARDEAU, MISSOURI 63701

MAINTENANCE SUPERVISOR
Larry D. Dowdy

ATTORNEY
Harry H. Bock,
New Madrid, Mo.

STATEMENT OF LARRY D. DOWDY
THE LITTLE RIVER DRAINAGE DISTRICT
CAPE GIRARDEAU, MISSOURI
APRIL 15, 1986

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

MY NAME IS LARRY D. DOWDY. I LIVE IN CAPE GIRARDEAU, MISSOURI AND SERVE AS MAINTENANCE SUPERVISOR FOR THE LITTLE RIVER DRAINAGE DISTRICT OF SOUTHEAST MISSOURI. MY TESTIMONY WILL RELATE SPECIFICALLY TO F. Y. 1987 APPROPRIATIONS AND FOR THE ST. FRANCIS BASIN PROJECT OF THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT.

I AM TESTIFYING TODAY ON BEHALF OF LEVEE AND DRAINAGE DISTRICTS WITHIN THE ST. FRANCIS BASIN PROJECT IN SOUTHEAST MISSOURI AND NORTHEAST ARKANSAS. MOST OF THESE LOCALLY TAX FUNDED AND OPERATED DRAINAGE AND LEVEE DISTRICTS ARE DEPENDENT UPON OTHERS FOR THEIR OUTLETS INTO THE ST. FRANCIS AND MISSISSIPPI RIVERS.

OUR REQUEST IS $11,750,000 FOR CONSTRUCTION IN THE ST. FRANCIS BASIN PROJECT WHICH IS THE CORPS CAPABILITY. ALSO $3,719,000 IS IN THE F. Y. 1987 BUDGET FOR OPERATIONS AND MAINTENANCE WHICH IS $1,812,000 LESS THAN THE CORPS CAPABILITIES. THESE AMOUNTS ARE SUPPORTED BY OUR DISTRICT AND ASSOCIATION AND DO REFLECT A SLIGHT INCREASE ABOVE THE F. Y. 1986 APPROPRIATION. YOU WILL NOTE THAT IN THE OVERALL MISSISSIPPI RIVER AND TRIBUTARIES BUDGET THE CONSTRUCTION MONIES EXCEED THE PLANNING AMOUNTS BY A GOOD AMOUNT WHICH WE CONSIDER A GOOD AND WORKABLE DIFFERENCE. THIS IS SOME CHANGE FROM PAST YEARS WHICH WE HAVE ADDRESSED BEFORE. WE THANK THIS COMMITTEE FOR THEIR SUPPORT IN CORRECTING THE PAST IMBALANCES OF CONSTRUCTION VS PLANNING AND DESIGN MONIES.

WE GREATLY APPRECIATE BEING GIVEN THIS OPPORTUNITY TO APPEAR BEFORE THIS COMMITTEE AND TO MAKE YOU AWARE OF THE NEEDS OF OUR AREA. WE ARE CONFIDENT THAT OUR REQUESTS WILL RECEIVE THE SAME POSITIVE CONSIDERATIONS AFFORDED US IN THE PAST. WE HAVE A NUMBER OF INDIVIDUALS PRESENT WITH US TODAY WHO HAVE TRAVELED GREAT DISTANCES AND WHO HAVE TAKEN TIME AWAY FROM THEIR BUSY SCHEDULES TO SHOW THEIR CONTINUED SUPPORT FOR THE ST. FRANCIS BASIN PROJECT. WE ALSO SUPPORT THE OTHER REQUESTS MADE BY THE OTHER WITNESSES OF THE LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION.

RESPECTFULLY SUBMITTED,

MAINTENANCE SUPERVISOR
THE LITTLE RIVER DRAINAGE DISTRICT

Mr. **Emerson.** Mr. Bolls.

Mr. **Bolls.** I am Newman Bolls, from Greenville, Mississippi. My counterpart, Mr. Joseph Mooney, from Clarksdale, has an item he has filed for the record. We concur in the statements that have been made by the spokesmen as far as the general conditions in the Lower Valley.

I am real frustrated, Madam Chairman. I just came back from a cost sharing program, and I hope I don't take my frustration out on anyone. I am terribly frustrated about this. We are very grateful that Chairman Whitten has made his statement, and I am sure that we heartily concur in it. He is one of the architects for this basin project, and I know he has informed and instructed and educated and talked to this committee about it so that you all are probably as familiar with it as I am, so I will not go into great, great detail about it.

But as he has stated, the basin is a very complex system. It is divided into segments, only for identification for appropriations, none of them could operate efficiently without it, so we do not look upon this as a separable item, we look at it as a whole. But for identification, there are some various segments of the Upper Yazoo project, the Tributary projects, the Main Stem, four major reservoirs. The Big Sunflower River project, and last but not least the Yazoo Water project. I know we have heard much talk about that. We have in our statement a list of these projects for recommended appropriations. We did not deviate from the recommended Presidential budget of $24 million.

We have explained in detail why and how this money is needed and how it can be used. But I would like to make some specific references to the Yazoo project because it has a special meaning. It is actually being treated in a separate and distinct manner from any other project in the entire United States.

This project was authorized in 1941, and at that time Congress very wisely recommended that the great work that is going to be done along the entire, not just Lower Mississippi Valley, but the entire Mississippi Valley was going to have very decided and disastrous effects upon this area of the Yazoo Basin. At that time they, in recognizing this, they authorized the construction of flood gates and pumping plants as early as 1941, and recognizing this is being placed on this area not of the own doings of these people, but because of what was happening in this great nation of ours, they stated they should be instructed to maintain and operate it at Federal expense.

Now we come down to this stage and find all the rules are now being changed. We had funds, Congress very wisely—and we deeply appreciate it—appropriated funds in fiscal year 1985 and 1986 specifically authorizing and directing that this project be initiated. But it was only during our meeting in New Orleans last year—that was one of the highlights—that we received notice they finally released these funds and allowed this project to begin.

The Corps of Engineers opened bids for the initiation of this work in March of 1986. The day that the contract was supposed to be initiated and executed, we had a stop order that was placed, from Washington, for more studies. Keep in mind the volumes could fill this room. They wanted some more studies. But with great people like you, Congressmen and Senators from Mississippi, they got that released on April the 7th. We were so anxious to get it consummated, the contract consummated, that the Corps of Engineers sent a messenger in a car and hand-delivered the contract to get it executed in the deal.

We had the most speedy mobilization of equipment in the history of construction. The contractor was only there just a couple days, and he was already digging dirt. But in our meetings this morning and also last week, when I talked to the Assistant Secretary, he told me, "I got some good news for you, and I have some bad news for you. The good news is that we have released the money, and you can start the project; the bad news is even though it is not cost sharing now, we are going to make everything else cost sharing."

So that is the reason for my utter frustration that I feel right now. We feel that we have fulfilled all of these requirements. We feel by getting this contract initiated by the determined date of May 15th, 1986, which is contained in the Senate Bill 1567, that we should be, you might say, free. But now, no later than 9:15 this morning, we were called to the Cannon Building and told that this project is being singled out and that any further work on it would be subject to each individual item—each individual item would be subject to cost sharing.

It is beyond our means to fulfill that. We are talking about $20 million of cash to come up with for this project. We do not believe that the will of Congress, we do not believe the laws that have been passed by this great body are being fulfilled. It seems to us the Yazoo project is being subjected to a line-item veto, that one project out of all of this great mass of civil works projects in our nation is going to be singled out, and we are going to have to be treated another way.

We plead for the understanding, we throw ourselves on your mercy up here to please understand the plight, the absolute desperation that we feel, and to bring some relief to us. This project has been going on for 41 years. I have been personally fighting and been connected with it for 32, half of my adult life, and I certainly would like to see it fulfilled. There is no money in the 1987 budget. We are not asking for any particular funds, but we know that with the great understanding this committee has always shown us that you will recognize with great compassion the desperation that we feel and will, if at all possible, see that funds are provided for an expeditious and orderly continuation of this project and, two, to see that those funds are spent in the manner in which they are appropriated and see, please, that the laws that you great people in the Congress pass after such deliberation are carried out.

Thank you so much for allowing me to express my frustration to you. Thank you kindly.

[The statement of Newman Bolls follows:]

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STATEMENT TO SUBCOMMITTEES ON APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT - MISSISSIPPI RIVER AND TRIBUTARIES PROJECT - APRIL 15, 1986

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I am Newman Bolls, Chief Engineer, Board of Mississippi Levee Commissioners, Greenville, Mississippi, and I have the privilege of being the spokesman for the people in the Yazoo Basin in Mississippi. Mr. Joseph F. Mooney, Jr., Chief Engineer, Board of Levee Commissioners Yazoo-Mississippi Delta, Clarksdale, Mississippi, will submit a statement for filing with the record.

The Lower Mississippi Valley Flood Control Association will present a general statement in support of a recommended budget for $324,384,000 for FY87 for construction, surveys, and advanced engineering of Mississippi River and Tributaries Project. These recommendations are made after very careful consideration of the President's budget and an analysis of the Corps of Engineers' capabilities. We strongly feel that this amount of money can be most wisely expended for the orderly prosecution of the Mississippi River and Tributaries Project, being ever mindful of the current financial burdens being faced by this nation and the need to bring spending under control and develop a balanced budget.

The Mississippi River and Tributaries Project was created by the Flood Control Act of May 15, 1928 following the disastrous flood of 1927 which has been described as the greatest national peacetime disaster to ever occur in the United States. The nation recognized at the time of enactment of this Flood Control Act that flood control in the lower Mississippi Valley was of national concern and responsibility rather than one of local responsibility, and there would be no direct cost-sharing responsibilities other than those that were incorporated in this act. We hold that these principles are still valid and that these limitations and exemptions still exist and that any further cost-sharing other than what was originally authorized is eminently unfair and burdensome to this area.

I will address my remarks principally to the Yazoo Basin in Mississippi. Following is a list of projects in the Yazoo Basin with a recommended total expenditure of $24 million. We strongly recommend and endorse this amount.

YAZOO BASIN, MISSISSIPPI

Project	FY87 Budget
Upper Yazoo Projects	$ 14,200,000
Main Stem, Yazoo	2,100,000
Tributaries All work except Ascalmore-Tippo-Opossum	3,600,000
Tributaries Ascalmore-Tippo-Opossum Bayous	200,000
Big Sunflower - Steele Bayou	2,800,000
Yazoo Backwater	1,100,000
Total Yazoo Basin -	$ 24,000,000

The Yazoo Basin in Mississippi is a unique area and while being recognized as being one of the most productive agricultural areas in the entire world is still highly diversified and does not depend upon agriculture alone. This area is absolutely dependent upon adequate flood control and interior drainage for its very survival and the complex project that is designed to provide these two vital functions must operate as a whole rather than individual parts to be in any wise effective. The yearly expenditures made on this area are capital improvements and the annual return to this economy is many times the amount developed by the original benefit to cost ratio justifying these improvements. This area plays an increasing role in providing food, fibre and manufactured goods to this nation and the world and in order to fulfill this great destiny, this basin must have protection from these great natural disasters resulting from floods.

The Main Line Levees along the lower Mississippi River are the most important feature of the Mississippi River and Tributaries Project and are our first line of defense. It is, therefore, imperative that sufficient funds be provided on an annual and continuing basis to assure that the programs for strengthening these irreplaceable flood control structures progress without interruption.

The major and inseparable features of the Yazoo Basin Project are the Upper Yazoo Projects, the Main Stem, the Tributary Items, Big Sunflower River including Steele Bayou, the Yazoo Backwater Project, and the four national flood control reservoirs at Sardis, Grenada, Enid and Arkabutla, and each of these items, though listed separately, must function in complete harmony with the others for this project to operate as designed.

The Upper Yazoo Projects are Main Stem Yazoo and Tallahatchie Channel Improvements which will effectively reduce stages on the Yazoo and Tallahatchie Rivers by as much as five feet. The recommended appropriation of $14,200,000 will be effectively used to initiate channel and levee items 3-A to complete utility relocation at East Hollie Lake and to continue the Fort Pemberton Control Structure near Greenwood. We strongly recommend this appropriation for the continuation of this work.

The requested appropriation of $2,100,000 for the Main Stem Items will be efficiently used to complete one drainage structure at Bee Lake made necessary by the revised flowline established for the Mississippi River levees resulting in inadequate levee heights on the completed Main Stem Project levees.

The Tributary Items in this project will, when completed, alleviate flooding and improve drainage for extensive farmland acreage by enlarging channels, clearing and snagging and/or constructing levees along the many tributaries that enter the Yazoo or Tallahatchie Rivers from the hill escarpment. A total of $3,800,000 is requested for this work which will include bridge locations along Pelucia Creek, complete levee item 1-A along Pelucia Creek, and for advanced engineering and design.

The Big Sunflower River which at the present time basically involves Steele Bayou and Black Bayou in the western portion of the Yazoo Mississippi Delta will, when completed, alleviate flooding and provide improved drainage on 600,000 of fertile Delta land and is especially important inasmuch as it provides the only outlet of drainage for Greenville, Mississippi with a metropolitan population of over 50,000. We strongly recommend an appropriation of $2,800,000 which will be used to initiate a channel item through Steele Bayou and to provide mitigation measures for the U. S. Fish and Wildlife Service in Swan Lake.

The Yazoo Backwater area which lies at the lower end of the Yazoo Basin and towards the lower end of the lower Mississippi River Basin has to shoulder a tremendous responsibility for both of these basins. In August 1941, Congress authorized the improvements to the Yazoo Backwater area and was farsighted enough to recognize that the improvements to flood control and drainage throughout the lower Mississippi Valley would result in increased risks of backwater flooding from the Mississippi and Yazoo Rivers and at that early date authorized the construction of levees, flood gates and pumping plants to alleviate the conditions that they knew would be imposed on this area. Congress very reasonably and intelligently visualized these problems and provided by law that these pumping plants should be constructed, maintained and operated at federal expense. However, much to our dismay and extreme consternation, and in spite of the long series of promises,this project is being jeopardized because of proposed cost-sharing which would be prohibitive for this area to bear.

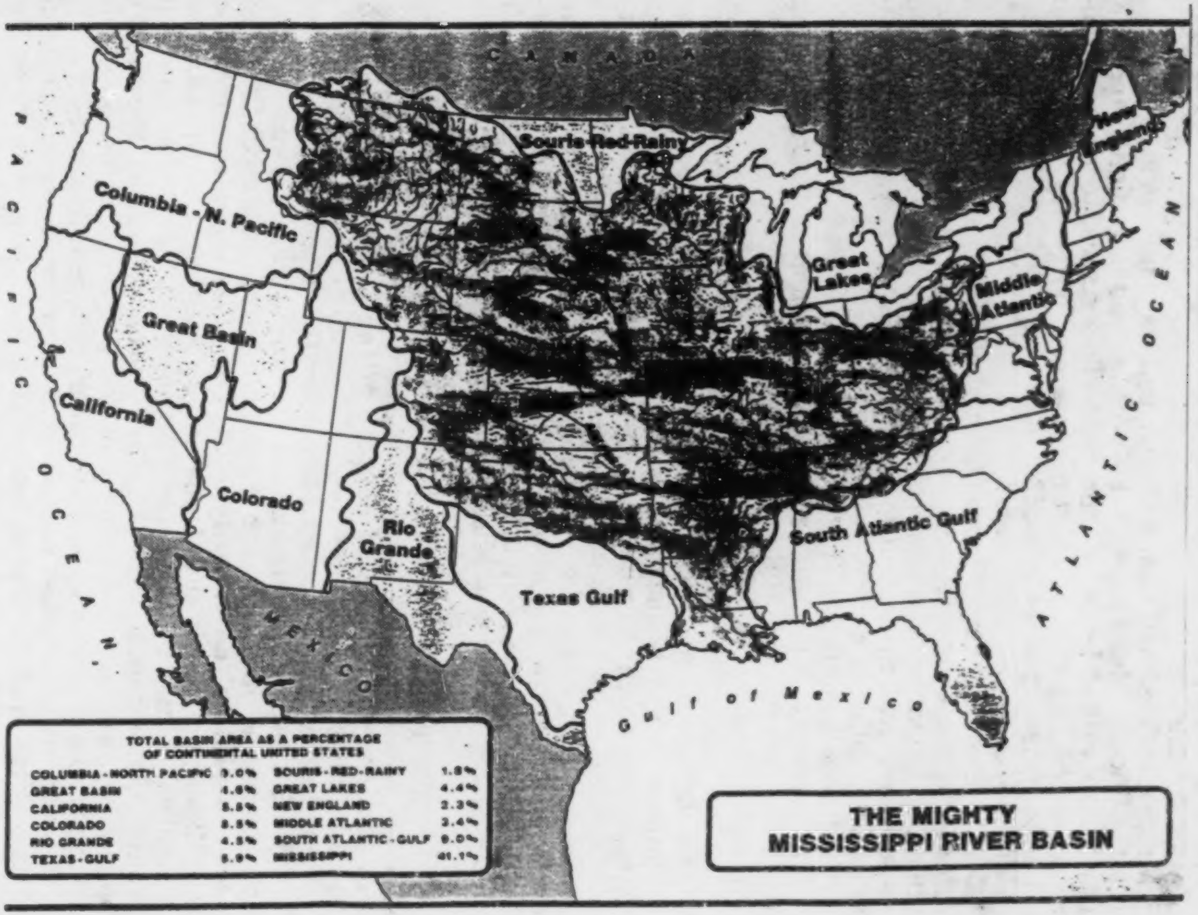
Congress, in its wisdom, appropriated funds to initiate construction of the pumping plant project in both FY85 and FY86, and if it had not been for the strongest type of support from our Senators and Congressmen, these funds would not have been released to be expended in the manner for which they were approriated. In December 1985 the Office of Management and Budget finally released these funds to initiate the construction of the Yazoo Backwater Pumping Plant. In March 1986 the Vicksburg District opened bids for this work, but due to a last minute procedural review, the award of the contract was placed on hold. Finally, on April 7, 1986, authority was issued by the Assistant Secretary of the Army and the Office of Chief of Engineers to the Vicksburg District to execute this contract which was accomplished on April 8, 1986. When the directive was issued to proceed with this work, there was a further stipulation attached that even though this contract was being awarded prior to the date of May 15, 1986 which is the effective date in the Abdnor Bill, we were still advised that because of agreements made by the executive departments of our federal government the remaining portion of the Backwater Pumping Plant Project would be subject to cost-sharing.

This is utterly astounding and to us is incomprehensible. This is a project that has been authorized since 1941 when no cost-sharing was required. It has now fulfilled the conditions recently passed by the Senate of the United States in Senate Bill 1567 and still it is being singled out For cost-sharing contrary to existing law and contrary to all previous commitments and agreements. This appears to be nothing short of an item veto which we have always been convinced by constitutional law to be illegal. We do not believe that the will of Congress is being served nor the law being adhered to if these procedures are allowed to continue. We strongly contend that if it could happen to this project, it could happen to any project.

Because this is such a vital project and has been so long authorized, approved and is under construction, we most fervently recommend that the Congress of the United States will (1) provide the needed funding to prosecute this project in an orderly, efficient and expeditious manner, and (2) assure that the funds that are appropriated are spent in the manner as authorized and directed by Congress.

We in the Yazoo Basin have always prided ourselves as being patriotic and self-sacrificing citizens. This is most evident by the vast expenditures of local taxes to finance and support the critical flood control and drainage problems so greatly affecting this area. We are very conscious of the urgency to contain the destructive spiral of inflation and return this country to fiscal responsibility. We are willing to do our part. We are agreeable to well-thought-out reductions that will not jeopardize the overall economy and ask only that we be treated fairly.

We are grateful for the careful consideration you have always given our requests and wish to thank and commend you on the difficult job you have always done so well in providing funds for these most beneficial projects.


CANADA
PACIFIC OCEAN
ATLANTIC OCEAN
Gulf of Mexico
MEXICO
Columbia - N. Pacific
Great Basin
California
Colorado
Rio Grande
Texas Gulf
Souris-Red-Rainy
Great Lakes
Middle Atlantic
New England
South Atlantic Gulf

THE MIGHTY
MISSISSIPPI RIVER BASIN

TOTAL BASIN AREA AS A PERCENTAGE
OF CONTINENTAL UNITED STATES

COLUMBIA - NORTH PACIFIC	9.0%	SOURIS - RED - RAINY	1.8%
GREAT BASIN	4.6%	GREAT LAKES	4.4%
CALIFORNIA	5.5%	NEW ENGLAND	2.3%
COLORADO	8.5%	MIDDLE ATLANTIC	3.4%
RIO GRANDE	4.5%	SOUTH ATLANTIC - GULF	9.0%
TEXAS - GULF	5.9%	MISSISSIPPI	41.1%

Mrs. Boggs. I wish we could wave the magic wand and take care of your frustration.

Mr. Bolls. We have such faith, we believe you can.

Mrs. Boggs. Mr. Emerson helped to lead the fight, and Mr. Bevill is a valued leader in the fight. This seems, to us, to fly directly in the face of the intent of Congress. What was the count on the amendment that we passed?

Mr. Bevill. It was two to one.

Mr. Emerson. Overwhelming. Overwhelming.

Mrs. Boggs. Overwhelming for that type of attitude and operation on the part of the administration. So we are behind you, and we are very grateful to you for being able to express your frustrations so specifically and so well.

Mr. Bolls. I am full of them.

Mr. Emerson. Mr. Patterson, the Department of Transportation and Development, Baton Rouge, Louisiana.

Mr. Patterson. Good morning.

Madam Chairman and members of the subcommittee, I am Curtis Patterson, and I am the Assistant Chief Engineer for Water Resources in the Louisiana Department of Transportation. I am here, my statement this morning is being presented in our capacity as the state agency designated to represent the State of Louisiana in the planning and orderly development of water resources and in our capacity as the engineering adviser to the levee boards of Louisiana, all of whom are members of the Association of Levee Boards of Louisiana, and Lower Mississippi Valley Flood Control Association.

My comments today summarize the written brief on behalf of the State of Louisiana and the Association of Levee Boards of Louisiana and are, in general, in support of the budget allowance proposed by the administration.

In discussing the proposed budget for the Mississippi River and Tributaries program in Louisiana, we are certainly aware of and appreciate the fact that the Federal Government recognizes the need to maintain the integrity of the Old River Complex separating the Mississippi River and Atchafalaya River. this continues to be recognized by the U.S. Corps of Engineers as the number one civil project in the nation. The $14,829,000 proposed in the President's budget will utilize full capability of the Corps of Engineers in this all-important project and will just about complete that project.

It has been a very fast operation, and we are certainly grateful to the Corps and to this subcommittee and those who have the funds to keep this project going as fast as they do. We urge the recommended amount appropriated for this project for fiscal year 1987.

Downstream from the Old River control structures is the Atchafalaya Basin Floodway, which must cover one-half of the project below the latitude of Old River. This floodway has been under construction since 1928 and not scheduled for completion until after the year 2000 and at the present time the floodway levee system contains only about 70 percent of its portion of the project flood.

We are, therefore, requesting Congress approve what has been submitted by the President and request you appropriate that sum of $35,600,000 for this purpose. Completion of the levee system throughout the floodway must be accomplished as soon as possible. For similar reasons, we are requesting that you approve the President's recommended budget for the Mississippi River and Tributaries project channel improvements. The project above Louisiana is about 90 percent complete, but to a much lesser extent in the State of Louisiana.

Continued development of the Upper Valley over the decades has resulted in increased flows in our state, in addition to natural changes occurring on the river. The $75,100,000 in the President's budget will provide for some of the dredging of work needed to accommodate those increased flows and the effect of the natural changes in the river. We are requesting that you appropriate that $75,100,000 for fiscal year 1987.

Some levees in Louisiana are still below project grade. As you all know, levees are the main line defense against flooding along the Mississippi River. And for this reason and for similar reasons cited above regarding the Atchafalaya Basin and channel improvements, we are requesting a modest increase in appropriations for the Mississippi levees in Louisiana. We are requesting an additional $2.5 million in order to utilize the full capability of the Corps of Engineers, which would be $24,200,000 for 1987.

I move now from the Mississippi River to a project that is part of the Mississippi River and Tributaries project but is in the Red River Valley. The Eastern Rapides South Central Project. The time is long past when construction should have begun on this project. It has been authorized since 1970, and its construction will reduce flooding in some 206,000 acres.

To minimize any further delays to this project, we in Louisiana are willing to defer progress on the Bushley Bayou Louisiana project, which was indicated for $150,000, and the Larto Lake-Saline Lake project, which is indicated to be $116,000, in exchange for utilization of the full capability of the U.S. Army Corps of Engineers on the Eastern Rapides and South Central Avoyelles Parishes Louisiana project. We are, therefore, requesting $1.250 million be appropriated for 1987 for this project.

With permission of this committee, I would also like to submit for the record a written statement on appropriations for navigation hurricane protection and water resources project in Louisiana other than in the Mississippi and the Red River Basin. This statement supports, in general, the President's recommendation for these projects.

We would appreciate all consideration and any consideration in the critical needs we have for this program for this committee, and we appreciate the opportunity in allowing us to present our oral statement and our written briefs to you.

[The statement of Louisiana Department of Transportation and Development follows:]

STATEMENT BY
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS
RECOMMENDING FISCAL YEAR 1987 APPROPRIATIONS

NAVIGATION, HURRICANE PROTECTION AND WATER RESOURCES PROJECTS IN LOUISIANA

PRESENTED TO: APPROPRIATIONS SUBCOMMITTEES ON ENERGY AND
WATER DEVELOPMENT
HOUSE OF REPRESENTATIVES - APRIL 15, 1986
SENATE - APRIL 15, 1986

The Louisiana Department of Transportation and Development, Office of Public Works is the agency designated to represent the State of Louisiana for the coordinated planning and development of water resources, including flood control, navigation, drainage, water conservation and irrigation projects; therefore, this statement is presented on behalf of the State of Louisiana. We are pleased to present the endorsement and recommendations for Fiscal Year 1987 appropriations for Louisiana projects. The projects listed herein are not contained in other separate statements by the Office of Public Works on the Red River Basin or the Mississippi River and Tributaries.

In making the following recommendations regarding construction, surveys and some selected operation and maintenance items, the State of Louisiana, in general, supports the President's budget recommendations for Fiscal Year 1987. These recommendations are made, not because the projects are unworthy of higher funding levels but because we agree that a balanced budget and reductions in projected deficits are worthy objectives and are in the best interests of the nation at this time; however, we also feel that water resources projects are probably the most worthwhile and cost-effective projects in the federal budget, having to meet stringent economic justification criteria not required of other programs. We ask that this be taken into consideration in the final decision-making process to allocate the available funds.

PROJECT	BUDGET ALLOWANCE	AND	LOUISIANA REQUEST
Construction			
Grand Isle & Vicinity		$ 1,000,000	
Lake Pontchartrain & Vicinity Hurricane Protection		16,000,000	
Larose to Golden Meadow		3,500,000	
Mississippi Delta Region Project Caernarvon Structure	-0-		500,000
Mississippi River, Baton Rouge to Gulf		19,400,000	

PROJECT	BUDGET ALLOWANCE	AND	LOUISIANA REQUEST
Construction			
Mississippi River, Gulf Outlet		2,000,000	
Mississippi River Ship Channel Baton Rouge to Gulf, LA		9,000,000	
New Orleans to Venice		3,000,000	
Ouachita & Black Rivers		7,880,000	
Pearl River Slidell, St. Tammany Parish, LA		759,000	

MISSISSIPPI DELTA REGION PROJECT, CAERNARVON STRUCTURE
(Budget: -0- (Request: $500,000)

The Caernarvon Freshwater Diversion project has been recommended for construction by the Corps of Engineers and the U.S. Fish and Wildlife Service. It has already been authorized by the Congress. Plans and specifications are being prepared and are virtually ready for construction. Funding is to be provided on a 2/3 federal/1/3 state matching basis. Cost estimates are in the range of $20 - $25 million. The structure is proposed to have a flow of 8,000 cu ft per sec. Freshwater from the Mississippi River will be introduced into an intermediate/brackish marsh to reduce salinities to approximate those years of high rainfall. A large area will benefit from the salinities to approximate those years of high rainfall. A large area will benefit from the salinity reduction including important oyster seed grounds east of the Mississippi River where the salinities will be maintained below 15 parts per thousand to retard the predator oyster drill. Habitat for many commercial species will also be improved.

It is requested that $500,00 for FY 1986 be provided to initiate construction on this very beneficial project.

PROJECT	BUDGET ALLOWANCE	AND	LOUISIANA REQUEST
Authorized Studies			
Amite River & Tributaries		$ 400,000	
Bayou Lafourche & Lafourche Jump Waterway, LA		50,000	
Gulf Intracoastal Waterway, LA & TX Section		625,000	
Louisiana Coastal Land Loss and Marsh Creation		220,000	
Louisiana Coastal Shore & Barrier Island Erosion		240,000	
Louisiana Coastal Water Supply		430,000	
Louisiana Coastal Area, Hurricane Protection		500,000	

PROJECT	BUDGET ALLOWANCE	AND	LOUISIANA REQUEST
Construction			
Mermentau-Vermilion & Calcasieu Rivers and Bayou Teche		460,000	
Ouachita River Basin, AR & LA		400,000	
Pearl River Basin		590,000	
Upper Bayou Teche, LA		140,000	

Operation and Maintenance	Estimated Allowance	and	Louisiana Request
Atchafalaya River, Bayou Chene, Boeuf & Black		$11,940,000	
Barataria Bay Waterway		722,000	
Bayou Bodcau Reservoir		302,000	
Bayou Pierre		10,000	
Bayou Teche		640,000	
Caddo Lake		86,000	
Calcasieu River & Pass		8,395,000	
Freshwater Bayou		1,425,000	
Gulf Intracoastal Waterway		11,664,000	
Houma Navigation Canal		1,620,000	
Lake Providence Harbor		356,000	
Madison Parish Port		227,000	
Mermentau River		420,000	
Mississippi River, Baton Rouge to Gulf		39,655,000	
Mississippi River - Gulf Outlet		6,140,000	
Mississippi River Outlets, Venice		2,252,000	
Ouachita & Black River		5,310,000	
Pearl River		116,000	
Red River Waterway - Mississippi River to Shreveport		2,262,000	
Removal of Aquatic Growth Tangipahoa River		1,388,000	
Wallace Lake		126,000	

We wish to express our thanks to the Appropriations Sub-Committees on Energy and Water Development of the House and Senate for allowing us to present this brief on the needs of the state. Without reservation, practically every single project in Louisiana which has been made possible through actions of these committees has shown a return in benefits many times in excess of that contemplated by the authorizing legislation. The projects which you fund affect the economy of not only Louisiana but the nation as a whole. The Office of Public Works appreciates accomplishments of the past and solicits your consideration of the appropriations requested for Fiscal Year 1987.

SUBMITTED BY: STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS

MARTY J. CHABERT
ASSISTANT SECRETARY

ARTHUR R. THEIS DEPUTY CHIEF ENGINEER	CURTIS G. PATTERSON ASSISTANT CHIEF ENGINEER FOR WATER RESOURCES	COAN J. BUECHE CHIEF, FEDERAL PROJECTS

STATEMENT BY
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS
RECOMMENDING FISCAL YEAR 1987 APPROPRIATIONS

MISSISSIPPI RIVER AND TRIBUTARIES PROJECT

PRESENTED TO: APPROPRIATIONS SUB-COMMITTEES ON ENERGY AND WATER DEVELOPMENT
HOUSE OF REPRESENTATIVES AND SENATE
APRIL 15, 1986

The Louisiana Department of Transportation and Development, Office of Public Works is the agency designated to represent the State of Louisiana in the planning and orderly development of water resources. This statement is presented in behalf of the State of Louisiana and contains endorsements and recommendations for Fiscal Year 1987 appropriations for Louisiana projects in the Mississippi River and Tributaries Project.

The following recommendations are in general support of the budget recommendations of the President for Fiscal Year 1987, with some minor exceptions.

MISSISSIPPI RIVER AND TRIBUTARIES
SUMMARY OF RECOMMENDED APPROPRIATIONS

LOUISIANA PROJECTS	BUDGET ALLOWANCE	LOUISIANA REQUEST
Construction		
Atchafalaya Basin	$ 35,600,000	35,600,000
Bayou Cocodrie & Tributaries	970,000	970,000
Channel Improvements	75,100,000	75,100,000
Mississippi River Levees	21,700,000	24,200,000
Old River, Louisiana	14,829,000	14,829,000
Tensas Bas'n, AR & LA	5,600,000	5,600,000
Boeuf & Tensas Rivers	(560,000)	(560,000)
Lake Chicot Pumping Plant	(815,000)	(815,000)
Red River Backwater Area	(2,725,000)	(2,725,000)
Tensas-Cocodrie Pumping Plant	(1,500,000)	(1,500,000)

LOUISIANA PROJECTS	BUDGET ALLOWANCE	AND	LOUISIANA REQUEST
Authorized Studies			
Atchafalaya Basin (Water & Land Resources)	170,000		170,000
Boeuf-Tensas Basin	950,000		950,000
Bushley Bayou Area	150,000		-0-
Larto Lake - Saline Lake, LA	116,000		-0-
Miss. & La. Estuarine Areas, LA & MS	780,000		780,000
Planning			
Eastern Rapides & South Central Avoyelles Parishes, La.	935,000		1,250,000
Operation and Maintenance			
Atchafalaya Basin	7,797,000		7,797,000
Bayou Cocodrie & Tributaries	115,000		115,000
Bonnet Carre Spillway	436,000		436,000
Channel Improvement	54,481,000		54,481,000
Lower Red River - South Bank Levees	62,000		62,000
Mississippi River Levees	7,395,000		7,395,000
Old River Control Structure	5,814,000		5,814,000
Red River Backwater Area	1,327,000		1,327,000
Tensas Basin, Boeuf & Tensas Rivers	1,784,000		1,784,000

NOTE:

The projects listed above are only those in Louisiana and directly affecting the State. We realize that there are others outside of Louisiana that are vitally important to the Project and in these areas, we endorse the recommendations of the Lower Mississippi Valley Flood control Association.

ATCHAFALAYA BASIN
(Budget: $35,600,000) (Request: $35,600,000)

This project is a Main Stem component of the flood control plan for the Mississippi River and Tributaries Project. The Mississippi River can safely carry only one-half of the project flood, or 1,500,000 cubic feet per second, below Old River; the other 1,500,000 cubic feet per second must be discharged through the Atchafalaya Basin. The levees which must confine this flow to the basin are now deficient because they have settled below original design grade due to consolidation of the underlying soils, and the design has been revised upward. This places the lives and welfare of 650,000 people and their property and improvements in 13 parishes in the immediate vicinity of the Atchafalaya Floodway in jeopardy each flood year. The tax assessment records indicate the value of potential flood losses to be approximately $8 billion, not including public improvements. Over the past half century, we have supported the

Mississippi River and Tributaries Project and have agreed that construction of flood protection works should start upstream and progress downstream. As a result, the Mississippi River and Tributaries Project is now more than 90% complete in sites upstream from Louisiana while the levees in the Atchafalaya Basin can contain only 67% of the project flood. Work on this project has been underway since 1928 and isn't scheduled for completion until the year 2000. We request that Congress provide $35,600,000 for this project for Fiscal Year 1987.

CHANNEL IMPROVEMENTS
(Budget: $75,100,000) (Request: $75,100,000)

Channel improvements and stabilization provide protection of levees and the many improvements behind them, as well as preventing unsatisfactory alignment where the river's bank is unstable. This project is also a Main Stem component of the flood control improvement program for the Mississippi River and the benefits are the same as for the other main stem components. The Mississippi River and Tributaries Project above Louisiana is about 90 percent complete but to a much lesser extent within Louisiana. Because of the improvements upstream, increased flows are a major problem in Louisiana where the project is lagging. The funds we are requesting will provide for the dredging and revetment work necessary to accommodate these increased flows.

MISSISSIPPI RIVER LEVEES
(Budget: $21,700,000) (Request: $24,200,000)

Construction of mainline Mississippi River Levees in Louisiana also lags behind construction in the upper valley. The same reasons that apply to our request for funds for channel improvements on the Mississippi River and improvements in the Atchafalaya Basin, apply equally well to our request for additional funds for Mississippi River Levees. We are requesting that $24,200,000 be appropriated for this important project.

EASTERN RAPIDES AND SOUTH CENTRAL AVOYELLES PARISHES
(Budget: $935,000) (Request: $1,250,000)

The time has long past when construction should have begun on this project. It was authorized in 1970, and its construction would reduce flooding on more than 206,000 acres. To minimize any further delays to this project, we in Louisiana are willing to defer progress on the Bushley Bayou, Louisiana project, and the Larto Lake - Saline Lake, Louisiana project, in exchange for utilization of the full capability of the U.S. Army, Corps of Engineers, on the Eastern Rapides and South Central Avoyelles, Louisiana project. We are, therefore, requesting that $1,250,000 be appropriated in Fiscal Year 1987 for this project.

LOCAL CONTRIBUTIONS FOR FLOOD CONTROL IMPROVEMENTS

Historically, Louisiana has always done its part in cooperation with the Federal agencies concerned with flood control. The Louisiana State Board of Engineers, the forerunner of the Office of Public Works, was created in 1879 the same year as the Mississippi River Commission to coordinate the planning and construction of the required flood control facilities to protect the State. Since that time, local expenditures for flood control have exceeded $730,000,000. This amount adjusted to 1979 dollars represents expenditures in excess of $5.3 Billion. Nearly one-half of the potential flooded area of the Lower Mississippi River Valley lies in Louisiana. Local expenditures for flood control have increased with the growth of the valley. This record not only meets, but exceeds any National Water Policy local participation requirements ever put into practice.

The State of Louisiana, its Office of Public Works, in particular, wishes to commend the Appropriations Sub-Committees on Energy and Water Development and express our appreciation for the foresight and understanding exhibited in the past of the need for authorizing adequate levels of appropriations for water resources projects which are vital to the national interest. We solicit your further consideration of the recommendations presented herein.

Submitted by:

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS

MARTY J. CHABERT
ASSISTANT SECRETARY

ARTHUR R. THEIS
DEPUTY CHIEF ENGINEER

CURTIS G. PATTERSON
ASSISTANT CHIEF ENGINEER
FOR WATER RESOURCES

COAN BUECHE
CHIEF, FEDERAL
PROJECTS

Mrs. Boggs. Thank you, sir.

Mr. Emerson. Mr. Chairman, could I make a comment following the fine testimony that has been presented here?

Congress has been constantly committed to the completion of the MR&T project. How that should be undertaken gets rethought, and I suppose that is natural, but there is a commitment. We are not talking about something new; we are not talking about building a new dam and a new lake on a stream that simply might be nice to have. We are talking about the Mississippi River. If there is any doubt about the obligation of the nation to look after the Mississippi River, which does drain 41 percent of the Continental United States, I have said time and time again, if there is any doubt of the magnitude of the problem, one only has to read the first paragraph in Mark Twain's "Life on the Mississippi" to fully understand what the Mississippi River is all about. There is no question that it is a national problem and a national resource and it ought to be tended to as such. And since 1928 that has been the commitment of the United States Congress.

Our local communities up and down the river do not have the resources to participate on a cost sharing basis. The House has very clearly spelled out its intent, in my judgment, through action on the supplemental last year and through the authorization bill. It seems there is something going on outside the context of what we are doing here. Whether it is the lack of specificity in the Senate language or some rethinking of philosophy in the administration, I don't know what it is, but I think we have an obligation to nail this thing down and to continue our pursuit of completing the MR&T without local cost sharing. And I am committed to continuing to work with all of you toward that end.

Mr. Bevill. [presiding]. Mrs. Boggs.

Mrs. Boggs. Thank you very much, Mr. Emerson and all of you. Mr. Simmons, I have been intimately associated with the project for the whole 50 years of its existence. I was a little girl in 1927, and I remember my mother was the head of the Red Cross in our area. We were on high ground, and we had tent cities erected on our grounds. We had to take care of the needy and the ill and so forth.

In addition to that, Mr. Bolls' project, I can remember in a flood that it was a very threatening and terrible body of water. I know full well the levee boards were apprehensive about giving over their prerogatives to the National Government, but the National Government prevailed and said it was a national problem and had to be addressed by the National Government.

Since that time, all of the projects in the Lower Mississippi River Valley have been of the highest national priority. When Secretary Dawson was before us recently, I asked specifically what the cumulative investments in the project over the last half century were, and what the benefits were, and the total benefits he reported over the life of the MR&T project have been approximately $100 billion.

And then I asked what kinds of contributions local authorities were required to make, and he gave me a dollar value to local contributions through the years. And, of course, what has happened is we have over 900 billion local dollars just in the Louisiana area alone. So I thank you very much for your compelling testimony. It certainly answers many of the problems that we have with the administration.

Mr. Bevill. Bill, certainly I think you summed it up mighty well there, and Mrs. Boggs and Mr. Bolls, $20 million—might as well be talking about $100 million.

Mr. Bolls. We feel we have paid for this project before we ever started.

Mr. Bevill. Yes. I hope we can help you get the message across to the Senate over there, because that is the key to it. As you know, on this side, you have tremendous support, and this subcommittee supports you 100 percent. As you know, the bill, H.R. 6, is not in the conference, and the key to it is if you could get the Senators over there to support a provision in the Conference Committee there that would resolve this so that they wouldn't be putting an impossible burden on your local government.

So we have got to get that changed, and I know you are going to have the entire support of this Appropriations Subcommittee to do it in dealing with this authorization bill that is pending over there. This committee has nothing to do with it, I might add, other than we are directly concerned because it places limitations on us as to what we can do in the way of appropriating the funds.

So we are directly concerned and affected by it, but the key to it is the conferees in the Senate, and if you can do that, you are going to have the support of the House, as Bill knows so well, so I hope we can. We will have to all work together and try to get this thing under control.

But it is nice to see you. We appreciate your appearance and your fine testimony, and thank you again.

Tuesday, April 15, 1986.

LOWER MISSISSIPPI VALLEY PROJECTS

WITNESS

JAMES R. CARTER, CHAIRMAN, FLOOD CONTROL COMMISSION DELTA COUNCIL

Mr. Bevill. The committee will come to order.

The chair is pleased to recognize Mr. James Carter, Chairman of the Flood Control Committee, Delta Council, and you may submit your prepared statement and just proceed as you wish.

Mr. Carter. Thank you, Mr. Chairman.

My name is Jimmy Dick Carter of Rolling Fork, Mississippi, and I currently serve as chairman of the Flood Control Committee of Delta Council, an area economic development organization that represents the interests of more than 600,000 people in an area commonly known as the Yazoo-Mississippi Delta. My family and I have a farming operation consisting of crops in cotton, soybeans, rice and catfish.

Prior to my brief statement, on behalf of Delta Council and the citizens of our area, we would like to express our deep appreciation to the chairman and members of this subcommittee for the faithful commitment which you have maintained toward flood control and drainage throughout the entire inland waterways system and, more especially, in the Lower Mississippi Valley. Had it not been for the foresight and determined efforts of members of this subcommittee, many areas throughout the United States, similar to the area in which I live, would have to forego potential economic growth due to the loss of protection against the costly damages due to the natural phenomena of flooding.

The Yazoo-Mississippi Delta has long been recognized as one of the most valuable agricultural areas of the entire nation, and since the passage of the first major flood control legislation of the early 1900s, Congress has recognized the importance of providing special emphasis to the development of needed improvements in flood control to protect the rich natural resources of the area. Additionally, local efforts, coordinated through the extremely effective leadership of the two levee boards representing the Yazoo-Mississippi Delta area, have contributed more than $125 million in local investments toward the maintenance of our main line levee system on the Mississippi River and improvements in interior drainage throughout the area.

The members of this subcommittee have heard Delta Council express interest in the Yazoo backwater project as a vital component in the Mississippi River and Tributaries projects on many occasions in the past, and through your leadership, vast improvements have been registered on all phases of this vitally important program. You have served as missionaries among your colleagues in an attempt to keep Congress apprised of the national scope and the necessity for a strong Federal presence in this area, which serves as the bottom of a funnel that drains 41 percent of the entire continental United States. Repeatedly, the leadership of this subcommittee has been responsible for Congressional support of exempting this duly authorized MR&T project from any cost-sharing provisions that might be studied for future water projects.

Although Delta Council has a keen interest and deep commitment to the completion of a fully developed flood control and drainage system throughout the entire Lower Mississippi Valley, I would like to focus the remainder of my remarks on the absolute necessity of the completion of the Yazoo backwater pump project as authorized by Congress. Improved drainage on the upper reaches of the Mississippi River system and steady progress of the improved drainage of the interior streams throughout the Yazoo-Mississippi Delta area have caused tremendous risks to be associated with living and owning property in the lower delta area.

During 1973 high water stages, a body of water 62 miles from north to south and approximately 25 miles wide covered the lower delta region, and again in 1974, 1975, 1979 and 1981, the citizens of this area sustained costly losses to their property and homes as a direct result of the incompletion of the Yazoo backwater project. It is undebatable that Federally supported water projects improvements throughout the upper reaches of the Mississippi River system and the progress registered on interior drainage throughout the Yazoo-Mississippi Delta has increased the threat of potential damage to the Lower Mississippi Delta area if the Yazoo backwater project is not completed on schedule as authorized by Congress. Even though families in this area have sustained recurring losses to their property and homes, these rural Americans have remained faithful and confident in the Federal role which has been restated on several occasions since 1941 when the project was authorized exempting it from any local cost-sharing features.

In conclusion, I feel that it would be appropriate for members of this committee to fully understand the severe economic impact imposed upon this region as a result of flooding in the Yazoo backwater area largely due to the improvement of our national system of flood control and drainage efforts that Delta Council enthusiastically supports. During those years when backwater flooding has occurred in the lower delta area, not only are homes, property, and manufacturing and commercial operations required to be restored, but the lack of adequate protection from flooding has almost totally denied this economically distressed area for attracting investments by industries and businesses that might otherwise have located in the area.

Besides the lost potential in business and industrial development to the area, the Yazoo backwater area's agriculturally-based economy is threatened with financial disaster due to the accumulated losses that have accrued over the past decade due to area-wide flooding. Last year USDA estimated that the value of farm production in the counties of the Yazoo backwater area produced $82 million of cotton, $52 million of soybeans, $5.2 million of rice, and $6.2 million of farm-raised catfish, for a total of more than $145.4 million in total farm production.

We appear before you today to make a special appeal for your continued support and efforts to prevent the cost-sharing features of House Bill 6 and to extend to this duly authorized flood control project in the Yazoo-Mississippi Delta area in view of your longstanding support of this project. We acknowledge the very difficult task which you have in convincing your colleagues to maintain support for the previously established Federal role in projects such as this, and we conclude by expressing our deep gratitude for your insights and leadership in this very important national issue.

Thank you very much.

[The statement of Delta Council follows:]

DELTA Council

THE ORGANIZATION OF THE YAZOO-MISSISSIPPI DELTA

PROMOTING AND DEVELOPING THE ECONOMY AND SOCIETY OF ITS AREA

STONEVILLE, MISSISSIPPI 38776

Appropriations Subcommittee on Energy and Water Development
Committee on Appropriations
Rayburn Office Building, Room 2362
April 15, 1986

Testimony of James R. Carter, Chairman
Flood Control Committee of Delta Council
Stoneville, Mississippi

Thank you, Mr. Chairman. My name is Jimmy Dick Carter of Rolling Fork, Mississippi, and I currently serve as chairman of the Flood Control Committee of Delta Council, an area economic development organization that represents the interests of more than 600,000 people in an area commonly known as the Yazoo-Mississippi Delta. My family and I have a farming operation consisting of crops in cotton, soybeans, rice and catfish.

Prior to my brief statement, on behalf of Delta Council and the citizens of our area, we would like to express our deep appreciation to the Chairman and members of this Subcommittee for the faithful commitment which you have maintained toward flood control and drainage throughout the entire inland waterways system and more especially, in the Lower Mississippi Valley. Had it not been for the foresight and determined efforts of members of this Subcommittee, many areas throughout the United States, similar to the area in which I live, would have to forego potential economic growth due to the loss of protection against the costly damages due to the natural phenomena of floodi .

The Yazoo-Mississippi Delta has long been recognized as one of the most valuable agricultural areas of the entire nation, and since the passage of the first major flood control legislation of the early 1900's, Congress has recognized the importance of providing special emphasis to the development of needed improvements in flood control to protect the rich natural resources of the area. Additionally, local efforts coordinated through the extremely effective leadership of the two Levee Boards representing the Yazoo-Mississippi Delta area, have contributed more than $125 million in local investments toward the maintenance of our main line levee system on the Mississippi River and improvements in interior drainage throughout the area.

The members of this Subcommittee have heard Delta Council express interest in the Yazoo Backwater Project as a vital component in the Mississippi River and Tributaries Projects on many occasions in the past and through your leadership, vast improvements have been registered on all phases of this vitally important program. You have served as missionaries among your colleagues in an attempt to keep Congress apprised of the national scope and the necessity for a strong federal presence in this area, which serves as the bottom of a funnel that drains 41 per cent of the entire continental United States. Repeatedly, the leadership of this Subcommittee has been responsible for Congressional support of exempting this duly authorized M R & T project from any cost-sharing provisions, that might be studied for future water projects.

Although Delta Council has a keen interest and deep commitment to the completion of a fully developed flood control and drainage system throughout the entire Lower Mississippi Valley, I would like to focus the remainder of my remarks on the absolute necessity of the completion of the Yazoo Backwater Pump project as authorized by Congress. Improved drainage on the upper reaches of the Mississippi River system and steady progress on the improved drainage of the interior streams throughout the Yazoo-Mississippi Delta area have caused tremendous risks to be associated with living and owning property in the lower Delta area. During 1973 highwater stages, a body of water 62 miles from north to south and approximately 25 miles wide covered the lower Delta region and again in 1974, 1975, 1979 and 1981, the citizens of this area sustained costly losses to their property and homes as a direct result of the incompletion of the Yazoo Backwater project. It is undebatable that federally supported water projects improvements throughout the upper reaches of the Mississippi River system and the progress registered on interior drainage throughout the Yazoo-Mississippi Delta, has increased the threat of potential damage to the lower Mississippi Delta area if the Yazoo Backwater project is not completed on schedule as authorized by Congress. Even though families in this area have sustained recurring losses to their property and homes, these rural Americans have remained faithful and confident in the federal role which has been restated on several occasions since 1941 when the project was authorized exempting it from any local cost-sharing features.

In conclusion, I feel that it would be appropriate for members of this Committee to fully understand the severe economic impact imposed upon this region as a result of flooding in the Yazoo Backwater area largely due to the improvement of our national system of flood control and drainage efforts that Delta Council enthusiastically supports. During those years when backwater flooding has occurred in the lower Delta area, not only are homes, property, and manufacturing and commercial operations required to be restored, but the lack of adequate protection from flooding has almost totally denied this economically distressed area for attracting investments by industries and businesses that might otherwise have located in the area. Besides the lost potential in business and industrial development to the area, the Yazoo Backwater area's agriculturally-based economy is threatened with financial disaster due to the accumulated losses that have accrued over the past decade due to area-wide flooding. Last year, U.S.D.A. estimated that the value of farm production in the counties of the Yazoo Backwater area produced $82 million of cotton, $52 million of soybeans, $5.2 of rice, and $6.2 of farm-raised catfish for a total of more than $145.4 million in total farm production.

We appear before you today to make a special appeal for your continued support and efforts to prevent the cost-sharing features of House Bill #6, to extend to this duly authorized flood control project in the Yazoo-Mississippi Delta area, in view of your long-standing support of this project. We acknowledge the very difficult task which you have in convincing your colleagues to maintain support for the previously established federal role in projects such as this, and we conclude by expressing our deep gratitude for your insights and leadership in this very important national issue.

Respectully submitted,

James R. Carter

Mr. Bevill. Thank you for a very, very fine statement, Mr. Carter. I don't believe you were in here at the time, but Chairman Jamie Whitten, of course, is very supportive of your position, and the entire subcommittee, and he would have been here and had planned to be here, except he had to attend Congressman Addabbo's funeral in New York. He did have a statement, which we put in the record. Thank you very much.

Tuesday, April 15, 1986.

RED RIVER BASIN PROJECTS

WITNESSES

HON. BERYL ANTHONY, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS
HON. BUDDY ROEMER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA
HON. JERRY HUCKABY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA
DON DUGGAN, CHAIRMAN OF THE BOARD OF DIRECTORS, RED RIVER VALLEY ASSOCIATION
JOE D. WAGGONNER, JR., CONGRESSMAN, FOURTH DISTRICT, BOARD OF DIRECTORS, RED RIVER VALLEY ASSOCIATION
WILLIAM C. CHAPMAN, VICE PRESIDENT, OKLAHOMA RED RIVER VALLEY ASSOCIATION
HOMER TANNER, VICE PRESIDENT, TEXAS RED RIVER VALLEY ASSOCIATION
JOHN STROUD, BOARD OF DIRECTORS, RED RIVER VALLEY ASSOCIATION
RANDALL JOHNSON, COMMISSIONER, RED RIVER WATERWAY COMMISSION
DON E. JONES, MAYOR, CITY OF BOSSIER
R.M. PRESTRIDGE, PRESIDENT, BOSSIER CHAMBER OF COMMERCE, COMMISSIONER, CADDO-BOSSIER PORT COMMISSION

Mr. Bevill. Next we have three of our good friends and colleagues: Congressman Beryl Anthony, and also Congressman Buddy Roemer. What happened to our old friend and former colleague, Joe Waggonner? Come and sit at the table, Joe. We don't get to see you enough. We need you back on the Ways and Means Committee. And then, of course, there is Mr. Harris, who is the President—Mr. Harris, will you come up?

Mr. Harris. Mr. Duggan, the chairman, will head our presentation.

Mr. Bevill. Step forward and have a seat, too. I am going to suggest, I recognize Congressman Anthony first. The chair will recognize you so you can go ahead and, recognize the two Congressmen, and then I will recognize Mr. Duggan.

Mr. Anthony. Mr. Chairman, thank you.

May I present Mr. John Stroud, who testified last year and who represents the Red River Commission. He is here to give a more detailed explanation of the Red River project. I also have with me my father-in-law, Vincent Foster, which explains some of my strong interest in this project.

Mr. Roemer. Self defense.

Mr. Anthony. Also from the State of Arkansas, I would like to introduce Jack Williams and Lynn Lowe who are here before the committe to extend their support of the project and to explain why this is such a valuable addition to their community. John Stroud will given the details.

Mr. Chairman, this is my eighth year in Congress, but my ninth year to appear before your committee to ask support not only for this particular water project, but other projects in the Fourth Congressional District.

I came to Washington to show my support for industrial growth through the development of projects. At the time I was a candidate; fortunately I won, and I am here for the eighth consecutive year. We have had some wins and losses. Your committee has given us money some years, some years they have zeroed us out, sometimes we have done better on the Senate side than the House side, but in conference we have come out better.

We are back again asking for your support for these very valuable water projects. I speak specifically of the Red River Commission. This Commission was created 17 years ago. The private sector has done what they said they would do. They have a huge savings account. They have the money ready, they are ready to match what monies we can get from the Federal Government. It was created to address an irrefragable loss of fertile farmland in Southwest Arkansas. We were losing and still are losing approximately 1,000 acres of very, very valuable farmland along the Red River.

So I am here specifically to ask the committee to appropriate $520,000 for fiscal year 1987 for preconstruction and planning of this comprehensive bank stabilization program. There are a multitude of other programs that the Congress also appropriates money for. Mr. John Stroud will go into them in detail. I am here showing my full support for all of those projects and their continued funding..

Mr. Chairman, there is one special thing that Mr. Stroud will talk to you about, and I would like to make the record very strong on my displeasure about this particular issue. This is an issue that not only has affected me on the Felsenthal wildlife project, which by the way I have come to this committee on two separate occasions to get straightened out, but we find it has also occurred on the Red River bank stabilization program. This committee for two separate years has given large amounts of pre-planned money to the project for planing purposes. Without our knowledge, the Corps has transferred this money into a slippage category. Without a close accounting on a day-to-day basis, a week-to-week basis, none of us were aware the Corps had put this money in the slippage.

As a result, the bank stabilization program is much further behind than we thought it would be. Mr. Chairman, this is the second time this indiscretion has occurred in my district. I think it is now time that this committee thought of some language that could be put in the future appropriations bills that forbids this practice. The Corps must be made to respect your decision to appropriate money to what I consider to be meat and potato-type projects, brick and motar in this case. This would give us clear evidence of any misuse of funds in the future.

In the previous case of the Felsenthal wildlife project, it was the clear intent of this Congress that the appropriated funds should go for recreation projects. Because of a change in attitude inside their administration, the corps decided not to spend it. We had to come back to you and ask for specific language that forced them to use the funds. This project should not be forced to operate this way. I think it is time, Mr. Chairman, and I do make this a strong suggestion to you, to entertain the thought of possibly tying the Corps' hands some way that when the money is appropriated, they would have to come back to this committee and ask direct permission before they could put it into slippage.

Otherwise the present situation will force us on a day-to-day basis to go to the Corps office and see exactly what is being done with that money, which puts us in a very untenable position the following year. We have to come back and ask you to do something the second year we thought we had corrected the previous year. Money is getting tight every year, so it seems possible that the transfer to holding of funds by the Corps is almost done purposefully because they know times are going to be more difficult.

So I ask your indulgence and ask you to listen to Mr. John Stroud with interest when he talks to you about the slippage problem. I thank you for the opportunity to testify.

I will submit my full statement for the record.

Mr. **Bevill**. Your full statement will be made part of the record, without any objection.

[The statement of Beryl Anthony, Jr., follows:]

STATEMENT OF U.S. REPRESENTATIVE BERYL ANTHONY, JR.

Mr. Chairman, I am pleased to be here today to introduce some of the people who have been extremely dedicated to and will testify on behalf of the Red River developement programs.

Mr. John Stroud, a prominent attorney in my district, represents the Red River Commission. Also here lending support to the work on the Red River are Vincent Foster, Jack Williams, and Lynn Lowe. Seventeen years ago the State of Arkansas became concerned with the rapid irreparable loss of its most fertile farm land in Southwest Arkansas and created the Red River Commission to address these concerns. The Commission has done an outstanding job of furnishing cooperation necessary for the construction and study of projects and coordinating with the Corps of Engineers and the Congress to develope the water resources of the Red River in Arkansas.

A tremendous amount of work has been done in the past few years in achieving bank stabilization on the Red River. Part of the problem of bank caving has been solved by building dams to control floodwater. However, the caving problem continues to be serious, with an estimated loss of over 1,000 acres of farm land yearly.

Congress has funded the Emergency Bank Protection program for many years, but more needs to be done to prevent the continued loss of valuable farmland. It is essential that Congress approve an appropriation of $520,000 during fiscal year 1987 to resume preconstruction planning of this comprhensive bank stabilization program. Mr. Stroud will detail the program requests in planning, bank stabilization, basin study work and navigation.

I am firmly in support of the request for continued Congressional budgetary support of these essential programs.

Mr. Bevill. And also all your statements, I might say, at this point, your prepared statements will be made part of the record, and you will be permitted to summarize your statement as you wish, and certainly, Beryl, we will look into that, because this concerns us a great deal. We appropriate money for one purpose, and it is used for another. This is a problem we run into frequently, and we hope we can be of assistance to you on this as we have in the past.

Mr. Anthony. Mr. Chairman, you have been very kind to us. I do have at the present time a very specific letter being drafted to send to you so that you will know the complete details of how it has occurred.

Mr. Bevill. Good.

All right. Next, the chair will recognize our good friend and colleague, Congressman Buddy Roemer.

Mr. Roemer. Thank you.

It is good to be back before you again on the Red River Waterway project. The project is considered to be important to my district, my state, and the Central and Southern regions of the country. Back in 1968, the Army Corps of Engineers and the Congress authorized the project realizing its importance.

The project's construction costs were initially justified by the Corps of Engineers on the basis of savings in year-round transportation costs, economic benefits achieved by stabilizing the river banks, and economic benefits derived from additional recreational facilities. The Corps studies showed that the primary economic benefits to the nation gained by constructing the waterway were greater than the construction costs.

Frankly, the project has changed in the last eight years—for the better. Since the time that the initial studies were done by the Corps, the Waterway project has opened up additional possibilities for economic growth, development and diversification along the corridors of the Waterway. Two of the major benefits now being analyzed are the construction of hydropower facilities and the availability of drinking water. Other benefits are the increase in business sales, earnings and jobs caused by the addition of new firms. Their could be as many as 15,000 additional jobs by the year 2020. Jobs, by the way, Mr. Chairman, are important to any part of the country, particularly to Louisiana, since we now enjoy—put that in quotes—the highest unemployment rate in America.

Mr. Chairman, I have been critical of this project and other water projects in the past during this time of fiscal austerity—but this project has come a long way since I first came to Congress. The Waterway is nearly halfway completed, the Federal Government and my state have invested a half of a billion dollars and the benefit-to-cost ratio has increased to 2:1. That is without the addition of drinking water benefits or hydroelectric power. We need to reap the most we can from each tax dollar invested in the project. The only way to do that, Mr. Chairman, is to finish it.

The President's proposed budget for the Red River project has cut funding from the fiscal year 1986 level of $95.7 million to $38 million. That represents a reduction of 60 percent, but, more importantly, it represents annihilation of the project, for all practical purposes.

A more reasonable approach, Mr. Chairman, would be a budget freeze or a reduction equivalent to the 4.3 percent mandated in Gramm-Rudman. We know that deficits hurt America. We are willing to sacrifice funding to achieve fiscal sanity. But a 60 percent cut, while foreign aid is up and there are 19 new starts in the President's budget, makes no sense.

The number one need for the Red River Waterway in fiscal year 1987 is the adoption of an appropriations bill that specifically mandates work in pools 3, 4 and 5 by project name. In other words, we must complete the project. The largest and most important of these projects, of course, is Lock and Dam 3. I am requesting that the committee, in consultation with the Corps of Engineers, fund the real full capability of the Corps at this site, Lock and Dam 3.

In addition, I am requesting that the committee include specific language to provide that an additional $30 million, for a total of $68 million, remain available for the Mississippi to Shreveport project, Red River emergency bank protection, et cetera.

If fully funded, the project could be completed in nine years. The project is already short of money, and the President's budget request makes it even shorter. We need the assistance of this committee to get things back on the right track. We are not asking for a handout. Louisiana carried its fair share of the load in the past and will continue to make its contribution to this project in the future. But we cannot do it alone, and we cannot do it with a drop in the bucket.

Finally, the President has requested $1 billion for water project construction, including 19 new water projects in fiscal year 1987. Our Federal policies need some consistency. We can't half do a job, drop it and run to begin a new project. We need to finish what we started. It makes economic sense and political sense.

Thank you, Mr. Chairman.

[The statement of Buddy Roemer follows:]

STATEMENT BY CONGRESSMAN BUDDY ROEMER
ON FY 1987 APPROPRIATIONS FOR
RED RIVER WATERWAY PROJECT, MISSISSIPPI TO SHREVEPORT, LA
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
ENERGY AND WATER DEVELOPMENT

APRIL 15, 1986

Mr. Chairman, thank you for allowing me to address your committee once again. As you know the Red River Waterway - Mississippi to Shreveport, Louisiana project is considered to be of vital importance to my district, my state and the central and southern regions of this nation.

Back in 1968 the U.S. Army Corps of Engineers, the U.S. Congress and the Administration all acknowledged the importance of this project with the authorization of the project in the River and Harbor Act of 1968. Today we are near the halfway point toward completion of this project. The Red River Waterway, when completed, will be 200 feet wide and nine feet deep, with five locks and dams located along the 236 miles from the Mississippi River to Shreveport. The project's construction costs were initially justified by the Corps of Engineers on the basis of savings in year-round transportation costs, economic benefits achieved by stabilizing the river banks, and economic benefits derived from additional recreational facilities. The Corps studies showed that these primary economic benefits to the nation gained by constructing the waterway were greater than the construction costs.

Frankly, the project has changed in the last 8 years — for the better. Since the time of the initial studies were done by the Corps the Waterway project has opened up additional possibilities for economic growth, development and diversification along the corridor around the Waterway. Two of the major benefits being analyzed now are the construction of hydro-power facilities and the availability of drinking water. Other benefits are the increase in business sales, earnings and jobs caused by the addition of new firms and the expansion of existing firms. In a recent study done by the Gulf South Research Institute on the secondary benefits associated the waterway project it was cited that there is potential for an increase of over 15,000 jobs by the year 2020. Jobs -- that's important to Louisiana -- the state with the highest rate of unemployment in the nation.

Mr. Chairman, I have been critical of this project and other water projects in the past during this time of fiscal austerity -- but it has come a long way since I first came to Congress. The Waterway is nearly halfway completed, the federal government and my state have invested a half of a billion dollars and the benefit-to-cost ratio has increased to 2:1. Today is tax day. Clearly, we need to utilize and reap the most we can from each tax dollar invested in this project. The only way do that is to complete it.

The funding for the Red River - Mississippi to Shreveport project has been cut by the President's budget from the FY 1986 funding level of $95.7 million to $38 million. This represents a reduction of 60% -- but, more important it represents annihilation of the project. A more reasonable approach would be a budget freeze or a reduction equivalent to the 4.3 percent mandated in Gramm-Rudman. We know that deficits hurt America. We are willing to sacrifice funding to achieve fiscal sanity. But a 60% cut, while foreign aid is up and there are 19 new starts in the President's budget, makes no sense.

The No. 1 need for the Red River Waterway in FY 1987 is the adoption of an appropriations bill that specifically mandates work in Pools 3, 4 and 5 by project name. The largest and most important of these projects, of course, is Lock and Dam 3. I am requesting that the committee in consultation with the Corps of Engineers fund the real full capability of the Corps, at this site.

In addition, I am requesting that the committee include specific language to provide that an additional $30 million (for a total of $68 million) remain available for the Mississippi to Shreveport Project, Red River Emergency Bank Protection and Red River Levees and Bank Stabilization Below Denison Dam.

If fully funded, the Mississippi to Shreveport project could be completed in 9 years. The project is already short of money and the President's budget request makes it even shorter. We need the assistance of this committee to get things back on the right track. We are not asking for a handout. Louisiana carried its fair share of the load in the past and will continue to make its contribution to this project in the future -- but we cannot do it alone and we cannot do it with a drop in the bucket.

Finally, the President has requested $1 billion for water project construction including 19 new water projects in FY 1987. Our federal policies need some consistency -- we can't half do a job, drop it and run to begin a new projects -- we need to finish what we started. It makes economic sense and political sense.

Mr. **Bevill**. The chair recognizes our good friend, Congressman Huckaby.

Mr. **Huckaby**. Thank you, Mr. Chairman. I too want to speak primarily to the Red River project, locks and dam 3 and 4. The next two, located in the next pool, are located in the Fifth Congressional District. As my friend and colleague, Congressman Roemer, just pointed out, we spent $95 million last year on this project. The President's budget only calls for $38 million this year, so it has probably taken as big a hit as anything in the entire Federal Government, a project this nation has identified as good for the nation.

We have submitted a list of proposed revetment and realignment projects that total an additional $30 million. I would urge the subcommittee and the committee to appropriate funds for these and to spell out specifically what these funds should be used for.

In addition to that, we see this as the key year for the Red River project. Are we going forward with lock and dam number 3? It is my opinion that the Corps of Engineers has the capability to spend $15 million in fiscal year 1987 on initial dirt work at lock and dam number 3. And I would urge the committee to specifically state $50 million of the funds allocated must be spent on lock and dam number 3. If you did these things, the amount that the Corps requested, $38 million, an additional $30 million for revetment and realignment, plus an additional $15 million, this would signal a firm solid commitment to go ahead with the project on lock and dam number 3.

We are still spending only $83 million, a significant reduction, 10 percent from what we spent in 1986. I would urge the committee to urge this course of action.

I also would like to speak briefly to another project in this area called Aloha-Rigolette. It is a small stream that flows into the Red River. With the second lock and dam coming on line, we are raising the pool stage of Red River. Hence, Aloha-Rigolette cannot flow into the river.

The Corps of Engineers has done a study and identified the need for six additional gates because we already had a flooding problem in this area. We need approximately $6.9 million to fund this project, but we need it now. I would urge the committee to take that into consideration.

Two other projects I would like to mention briefly. The Sicily Island project in the Tensas Basin, as well as Channelization work on the Tensas River, itself. For some reason, the Corps of Engineers has seemed to have lost their capability on these projects this year. I would like to see if we can find some funds since these projects have been in existence a number of years.

Mr. **Bevill**. Thank you for a very fine statement.

Now we recognize the Chairman of the Board of Directors of the Red River Valley Association, our good friend, Mr. Duggan.

Mr. **Duggan**. Thank you, Mr. Chairman, members of the committee.

I am Don Duggan, Chairman of the Board of the 61-year old Red River Valley Association. We appreciate this opportunity you have given us to come before you today, but before our testimony begins, I would like to introduce our supporters that have come with us.

General **Ed Harris** is our President. And everyone else who is in support of our project, will you stand? We brought them with us.

Mr. **Roemer**. Can I call for a vote, Mr. Chairman?

Mr. **Bevill**. It is very impressive that all you fine people took off, left your businesses and went to the expense of coming up here. The committee is always impressed with your support and enthusiasm about these projects. Do you want to put their names in the record?

Mr. **Duggan**. We sure do.

[The Red River Valley Association Attending Hearings in Washington follows:]

RED RIVER VALLEY ASSOCIATION
ATTENDING HEARINGS IN WASHINGTON
APRIL 15, 1986

Red River Valley Association
Don H. Duggan, Chairman of the Board, Shreveport, Louisiana
Edgar S. Harris, Jr., Lt. Gen. USAF (Ret), President, Shreveport, Louisiana
Lynn Lowe, Vice President, Texarkana, Arkansas
William C. Chapman, Vice-President, Ardmore, Oklahoma
Homer Tanner, Vice President, Hughes Springs, Texas
Harvey Bollinger, RRVA Board, McAlester, Oklahoma
Vincent Foster, RRVA Board, Hope, Arkansas
Robert Mansell, RRVA Board, Wylie, Texas
John Stroud, RRVA Board, Texarkana, Arkansas
Glenn Sullivan, RRVA Board, Oklahoma City, Oklahoma
Joe D. Waggonner, Jr., RRVA Board, Bossier City, Louisiana
Jack Williams, RRVA Board, Washington, D. C.

Red River Valley Association, Enterprise Chapter
Peter Ramsey, President, Shreveport, Louisiana

ARKANSAS
Arkansas Soil & Water Conservation Commission
Randy Young, Director, Little Rock, Arkansas

Red River Commission
Vincent Foster, Chairman, Hope, Arkansas
Lynn Lowe, Commissioner, Texarkana, Arkansas
John Stroud, Attorney, Texarkana, Arkansas

LOUISIANA
Bossier Chamber of Commerce
R. M. Prestridge, President, Bossier City, Louisiana
Ron Fayard, President-Elect & Board of Directors, Bossier City, Louisiana

Bossier Levee District
Dewey Burchett, Secretary, Bossier City, Louisiana
Syd Burt, Bossier City, Louisiana
Daliah MaGee, Bossier City, Louisiana
Franklin D. Roemer, Bossier City, Louisiana

Bossier Parish Police Jury
Doug Brown, President, Bossier City, Louisiana

Caddo-Bossier Port Commission
Sinclair Kouns, Shreveport, Louisiana
R. M. Prestridge, Bossier City, Louisiana
Diana Simek, Bossier City, Louisiana
John Turner, Shreveport, Louisiana

LOUISIANA (Continued)

Caddo Levee District
Richard M. Hoban, Lt. Gen. USAF (Ret), President, Shreveport, Louisiana
Jim Adger, Shreveport, Louisiana
Sam Barnwell, Shreveport, Louisiana
Chris Newsome, Shreveport, Louisiana
Murrell Stansell, Shreveport, Louisiana

Caddo Parish Commission
Francis Bickham, Administrator, Shreveport, Louisiana

Greater Bossier Economic Development Foundation
Congressman Joe D. Waggonner, Jr., Chairman, Bossier City, Louisiana
Doug LeBleu, Executive Director, Bossier City, Louisiana

Ken Juneau & Associates
Ken Juneau, President, Alexandria, Louisiana
John Boyles, Operations Director, Alexandria, Louisiana

Mayor
The Honorable Don E. Jones, Mayor of Bossier City, Louisana
The Honorable C. A. Rhodes, Mayor of Colfax, Louisiana

Red River, Atchafalaya, and Bayou Boeuf Levee District
Buford Smith, Commissioner, Effie, Louisiana
Kerri Sillavan, Alexandria, Louisiana

Red River Valley Area Council
Henry Marsland, Executive Director, Alexandria, Louisiana

Red River Waterway Commissioners
Norman Budd, Alexandria, Louisiana
Coy Cooper, Bossier City, Louisiana
Richard Gibson, Coushatta, Louisiana
Randall Johnson, Bunkie, Louisiana
Don Sonnier, Bossier City, Louisiana
Chester Wells, Alexandria, Louisiana
James Bagley, Legal Research Officer, Baton Rouge, Louisiana

Shreveport Chamber of Commerce
Arnold Lincove, Chairman Econ/Dev Foundation, Shreveport, Louisiana
Robert Daily, Manager, Governmental Affairs, Shreveport, Louisiana

Shreveport City Council
Tom Arceneaux, Councilman, Shreveport, Louisiana

State Department of Transportation & Development
Art Theis, Deputy Chief Engineer, Baton Rouge, Louisiana
Curtis Patterson, Asst. Chief Engineer for Water Resources, Baton Rouge, LA
Coan Bueche, Chief Federal Projects Section, Baton Rouge, Louisiana
Robert K. Smith, District Design & Development Engineer, Baton Rouge, LA
Jim Frederick, Attorney, Baton Rouge, Louisiana

OKLAHOMA

Red-Ark Development Authority
Harvey Bollinger, Director, McAlester, Oklahoma
Mary Goeske, McAlester Oklahoma

TEXAS
Greater Texoma Utility Authority
Jerry Chapman, General Manager, Denison, Texas
John Moseley, Denison, Texas

North Texas Municipal Water District
Robert Mansell, Assistant to the General Manager, Wylie, Texas
Marvin Youngblood, Boardmember, Richardson, Texas

Northeast Texas Municipal Water District
Homer Tanner, Manager, Hughes Springs, Texas
James William Dean, Assistant Manager, Hughes Springs, Texas
Ulvade Stoermer, Director, Hughes Springs, Texas

Mrs. **Boggs**. We have mayors and parish officials, as well as business and financiers among them.

Mr. **Bevill**. It is very impressive that your whole organization comes here each year and certainly strengthens this subcommittee's position when we get to the floor of the house, with all the local support the project has.

Mr. **Duggan**. I am sure by now you have missed two of our stalwarts, Barney Rothchild and Doug Attaway, who have been appearing here for some 30 years. Both of them are under the weather. They send their regards and tell you that they will be here next year.

Mr. **Bevill**. Good. Sorry they didn't make it this year.

Mr. **Duggan**. We have representatives of Arkansas, Oklahoma, Texas and Louisiana who will testify, in a moment, of the specific needs within their own states. We also have some very important supporters, as Mrs. Boggs has pointed out, we have mayors, Chambers of Commerce Presidents and a former Congressman who will address you shortly.

You can imagine how sorely disappointed we were to find out that no money had been allocated for the continuation of lock and dam number 3 in the next budget. We also cannot understand why it did contain money to begin 19 new projects. We feel that since ours is the last incomplete major waterway project in the United States and that some $600 million has already been invested in this project and that little benefit can be derived from it until we have at least five locks and dams, we feel that it is just poor economy to shut off the funds at this stage of the game.

All four of our states are dependent on oil, agriculture and lumber industries, all of which are sorely depressed. I can speak to you about the petroleum industry, there are 907 active rigs in the United States. That is down from 4600 in 1981 of December, and January of 1982. Our area, especially, North Louisiana, is heavily dependent on the oil and gas industry. I have laid off 145 employees in my own business, which manufactures drilling equipment. Now you just wouldn't believe the state of the oil and gas economy at the moment.

Buddy pointed out our unemployment rate. We have in excess of 13 percent. At the present time, we are leading the nation. Now, if we were allowed to continue this project, thousands of jobs for the citizens of the Red River Basin could be enjoyed, and this would help us tremendously.

Now, I was told yesterday by a man in the Office of Management and Budget that this was irrelevant, but I want to point out to you, and I intend before I leave Washington to find out just how much excess profit tax has been paid by the oil industry. Sixty percent of whatever was received by the government was received from these four states involved, and it is relevant to us that if we could get a portion of this returned, it would put a lot of people to work and help us tremendously in a distressed time.

I could tell you all day about reasons why this project should be continued, but we have other people who can do a better job than I can. Joe Waggonner, who served with you here, he ably represented the Fourth District of Louisiana for over 20 years, will be our lead-off witness.

Joe.

[The statement of Don Duggan follows:]

April 15, 1986

Mr. Chairman and Members of the Sub-Committee:

I am Don Duggan, Chairman of the Board of the Red River Valley Association. Our association is 61 years old and represents citizens from all walks of life in the four state area comprising Arkansas, Louisiana, Oklahoma and Texas who are vitally concerned with the continued development of the water and land resources of the Red River Basin.

During our presentation colleagues from each of the four states will address you to testify on specific needs within their own state, and I will open with a few general remarks.

We continue to lose thousand of acres of some of the finest farm land in the nation by the Red River's uncontrolled flow, causing massive bank caving along its entire length. These cave-ins not only result in the loss of valuable agricultural land, but constantly pose threats to levees, bridges, highways, railroads, utilities and pipe lines. To end this destruction, it is urgent that Congress provide funds necessary for emergency bank protection measures.

Clean water, for residential, agricultural and industrial use, continues to be a major concern of our association. We continue to permit hundreds of tons of salt and other minerals to be dumped into it everyday, polluting and making its water too saline for widespread use. Many communities and cities along the Red are short of potable water sources and are resorting to costly plans to insure their future water needs. An example being my home town of Shreveport of some 220,000 people that is planning a multi-million (Sixty to be exact) dollar storage facility to supplement its current water source in spite of the fact that Red River flows through the heart of the city. But in upstream areas of Texas and Oklahoma the situation is even more critical to the future well-being of communities and farms. Removal of the salt by implementing the Chloride Control Projects authorized by congressional passage of the 1966 and 1970 Flood Control Acts would enable the Red to serve as a practical water source for these communities.

Next, I want to comment on the Red River Navigation Project. With five locks and dams authorized for construction to carry the Waterway from the Mississippi to Shreveport-Bossier, the first is complete, the second is approximately 80% completed and in September 1985 we broke ground on Lock and Dam No.3 at Colfax, Louisiana to mark the halfway point on this project. Now we are told by the President's Budget that no funds are allotted for construction of Lock & Dam No.3 or continuation work upstream. We expected to be affected by national deficits and budgetary concerns, but to have this project stopped at the halfway point - while allotting funds to start nineteen new water projects elsewhere - is both unreasonable and unfair.

The four states Arkansas, Oklahoma, Louisiana, and Texas are all heavily dependent upon agriculture, oil and lumber. All of these industries are in a depressed state with Louisiana leading the nation in unemployment. Completion or continued construction of this project would mean a much needed shot in the arm for citizens in the Red River Basin. These jobs are vitally needed today to offset this high unemployment in the communities along the Red.

Our association is cognizant of the constraints on our Federal budget. We understand the necessity of moderation in funding projects where practical. We do not understand cutting us out completely, depriving our citizens of physical and economic benefits that are rightfully ours while funding new projects in other parts of the nation. Little benefit can be derived until the five locks and dams are completed. I therefore urge you to consider the investment and progress that has already been made in this project, the need and potential it represents, and to take the action necessary to insure completion of the Red River Waterway.

Thank you for allowing me to make these comments in behalf of the Red River Valley Association.

Mr. **Bevill**. We are always glad to hear from our former colleague, Congressman Joe Waggonner. I can indulge your statement, he did a great job here. He was a great Congressman, not only for Louisiana, but for the whole country. We will be glad to hear from you, Joe.

Mr. **Waggonner**. Thank you, Mr. Chairman, my other friends of the committee.

I am sure you will allow me to express my appreciation for these fine staffers who have been here throughout the years.

I want to thank you, Mr. Chairman, and members of the committee for allowing me and allowing us to come and talk with you again about something that is worthwhile. Since I have been out of Congress, I have made reference to the fact that I used to be with the people, but now I am with the interests. But now, in an instance like this, I must in all seriousness say that this is a matter of being with the people and with the interests, because this is in the interest of the people, make no mistake about that.

I am here in total support of all the programs in the Red River Valley, not just the navigation program, because I look forward to the day when the authorization is expanded and we do more. If we have not learned yet how foolish we can be with such things as national policy, surely by now we have demonstrated it in the instance of energy, but we are in the eyes of some even hell bent to be more foolish with regard to water policy, because some people don't seem to have any value about it.

Another thing, I am sorry he has gone, but the record will be here for him to see. My successor, Buddy Roemer, who is doing a good job here, makes mention of the fact it is not the project it once was, it is a project that has changed. Well, to a point it has changed, but so has he. I want to give him credit for that. I told him in Louisiana earlier this year, that finally he found out how to see it right. But the project has not changed, we are just talking in an expanded way about the program, itself. We still have what some of us who knew at the outset this program was intended to be. I was here and had a part in the authorization.

You will recall, and the record speaks for itself, in the instance of public works authorizations and appropriations, I have never ever opposed an authorization, nor have I opposed an appropriation, nor have I been guilty of voting to reduce such appropriations. I have done it out of a sense of fairness, and that is my appeal to you today. Who am I to say to those who have the responsibility for authorizing and appropriating the needed dollars to bring to final fruition these very valuable projects, and believe that they have a double standard, that they treat me one way and somebody else another way? I give you, as I always have, my complete confidence, and I know you utilize the same standard in doing whatever you do.

My former colleague and friend, Wes Watkins will remember, the gentleman from Oklahoma, Will Rogers. To Will Rogers I attribute one of my favorite sayings. He used to say, "Things ain't what they used to be," and he would muse further by saying, "As a matter of fact, they never were." So things really haven't changed. He is credited as well with having said that if for any reason they ever put a statue of him in the Capitol, they would point his head toward the House so he could see how his tax dollars were being spent. And, you know, if Will Rogers could come to life, he would approve of what we are doing because he knows it would be valuable for this country.

Well, things are different under today's rules. You have greater problems and bigger problems than we have had in recent years. We are not on a high, we don't have surplus dollars, as we have had on some previous occasions. But you understand, I am not here to argue the merits of Gramm-Rudman-Hollings, I am not here to argue the role of deferral. They used to call it impoundment. It is not anything much different, except the courts outlawed impoundments. They haven't gotten to the courts about deferral. You know I still adhere to the principle that this is a policy matter, and this is a responsibility of the Congress. The Congress, in its wisdom, has authorized, the Congress, in its wisdom, has in previous years appropriated, as you would with the available dollars, to do these needed things for the good of this country.

I have come here today to thank you for having done that in previous years, and I know that you are going to continue to do it. You are not to be dictated to, and I have no fear about you being dictated to by the OMB or anybody in the Executive Branch of Government.

I would not come here and make an appeal to you to give these projects in the Red River Valley a specific dollar figure. My only appeal to you is one of a sense of fairness, as you always have done, I always know you will continue, to do what you can to give us our fair share. That is all we want. We know that you are going to provide for that.

We have learned, and you have learned by past experience, that you have to pin these things down. I know that you have a problem with the appropriation with regard to legislative appropriation—the Senate has a little more latitude than you do, and I know you will take care of that in time.

Thank you for what you have done for us. I am going back to Louisiana knowing you will take care of us in the future and thank you for that. I have no prepared statement, and I will not submit any.

Mr. DUGGAN. Thank you, Joe.

Our next witness will be Mr. William Chapman. He is the Vice President of the Red River Valley Association in Oklahoma.

Mr. BEVILL. Glad to hear from you, Mr. Chapman.

Mr. CHAPMAN. Mr. Chairman, and Mrs. Boggs, members of the committee, I live in the Red River Valley and am a farmer-rancher there. I have properties that are on the Red River, and I have watched the embankments corrode and be washed down the river, so I am aware of what happens there.

I am representing Oklahoma, which almost half the state lies in the basin of the Red River Valley. We are very concerned with the natural resources, the utilization of water and how it is treated as it goes down the river. So I speak from not only personal experience in the river, but also I speak for the state.

As you are no doubt aware from our past discussions and your past actions, the Red River is greatly affected by the salt pollution that comes down the river, and that is the part of my testimony I would like to direct to you today. Other parts are in my written statement we will turn in and I spoke with you about them yesterday. But today I would like to speak primarily about the pollution that enters Red River.

In the past it has been determined by the Federal Government in conjunction with the state—both the States of Texas and Oklahoma—that there are great amounts of sodium chloride that enter the river in the upper reaches of Red River and come into Lake Texoma. I think it is something like 55 train carloads a day of sodium chloride dumped into Lake Texoma which affects quality all the way from where it enters the river to its mouth at New Orleans.

But definitely up and down the river and the upper extremities, the salt content is quite large, and, in fact, on my land that I farm, it is probably 100 miles downstream. I am unwilling and unable to use the water for irrigation purposes because I am afraid I will ruin the land. At any rate, it was determined that, earlier by the states and the Federal Government, approximately 66 percent of the salt entering the water in the Red River system came from natural sources, and about 33 percent came from man-made sources. The Federal Government and the two States of Texas and Oklahoma agreed sometime ago to undertake each of them, to set about to correct the sources, with the Federal Government responsible for roughly 66 percent and the two states for the 33 percent.

At this time, I can report to you that the two States of Oklahoma and Texas have about 85 percent of their 33 percent corrected. It has been removed from the river, and in an ongoing effort, the two states are spending somewhere in the vicinity of $5 to $10 million a year to correct and continue correcting this entry of man-made sources. The Federal Government has made efforts to correct their 66 percent. You have authorized, and the Corps has constructed two areas of salt, one which they completely control, area 8 has been authorized under construction. It is due to be completed and dedicated within the next six months, either this fall or next spring.

In this particular area 8, they have built a dam with a 22 mile pipeline which they have constructed and you authorized, they are pumping it to the Truscott Dam, where it is then handled by evaporation, and here is a large dam that was also built by the authorization. So not only in the original agreement, but through these items, we have all recognized the obligations which the three entities have to correct the forms of pollution on the Red River.

I think it also points out the states have had a major participation in, if you want to call it non-Federal cost-sharing of this project, to the effect you are sharing in about a third of it. We are requesting at this time that the Corps of Engineers receive 100 percent Federal funding to initiate the next step in this chloride project which would be to start construction on the area 6 and 10 in fiscal year 1987, and we feel it is extremely important to continue this because really we will not control much of the salt water and do much good if we don't eventually complete the entire project. We have contained two of the ten areas, and this would be starting construction on two more.

I think it is extremely important we continue this project because it affects the entire Red River Basin and the water quality all the way down for both municipal, as well as farm use and commercial use.

Thank you, sir. I appreciate your past considerations and future considerations.

[The statement of Bill Chapman follows:]

OKLAHOMA TESTIMONY
for
RED RIVER VALLEY ASSOCIATION

My name is Bill Chapman, and I serve as the Oklahoma Vice President of the Red River Valley Association. I was raised and still make my home in the Red River Valley. I am an attorney and a rancher. I and other members of my family have several agricultural holdings along the Red River in Oklahoma as well as Texas. As a result of these interests and being a lifelong resident of the Red River Valley, I am deeply interested and concerned about the proper development and utilization of this valuable national resource.

We in Oklahoma are concerned with several projects in the Red River Valley. This is appropriate since almost half of the State of Oklahoma is in the drainage basin of the Red River. The remainder of my presentation will address these projects and our request regarding each.

The Corps of Engineers, during FY '86, received funding for three hydropower projects. Two of these projects are existing lakes for which hydropower is being studied for addition as a project purpose. The third lake is a authorized project which is being restudied, prior to construction, to consider the addition of hydropower. Although none of these studies are scheduled to be completed with the funds provided in FY '86, two studies were not programmed to receive any additional funds in FY '87 under the proposed Corps of Engineers budget. We feel that it would be a significant waste of already invested resources to discontinue these studies prior to their completion. We therefore, in our written testimony, have asked for specific funding levels to complete these three studies.

There are two lakes in the construction phase in Oklahoma which we are vitally interested in. McGee Creek Lake is the only project under construction in the Oklahoma portion of the Red River Valley. This lake is being constructed by the Bureau of Reclamation as a multipurpose project. The dam is nearing completion with the entire project scheduled for completion in FY '88. In order to keep this project on schedule and to fully realize the previous investment, we are asking that $7,755,000 be provided to continue this project in FY '87.

The second lake I would like to discuss with you is Sardis Lake, a Corps of Engineers project. The dam and lake were officially dedicated in June of 1983. Although authorized at full Federal expense, $2.4 million worth of recreational facilities were never constructed. Without these facilities, the recreational benefits originally envisioned when the project was authorized cannot be achieved. We therefore ask that Congress provide $500,000 of funds this year, at full Federal expense, to accomplish additional recreation development as originally planned and authorized.

Another on-going effort important to the Oklahoma Delegation is the continuation of the Red River Basin Comprehensive Study. Feasibility studies for the Oklahoma portion are underway at full Federal expense, as directed by Congress, with completion scheduled for March 1989. We appreciate the support which this project has received from your Subcommittee since its authorization. It is vitally important to our area. We understand that the Corps has testified before Congress that if it received its full capability for FY '87 that it could accelerate the completion date to October 1988. Therefore, we request that Congress provide the capability in the amount of $1,150,000 in FY '87.

I would like to spend the rest of my time addressing two projects which have somewhat of an unique status. The first of these is Parker Lake. The Corps of Engineers completed an interim survey report on Parker Lake in 1975. This report recommended Parker Lake as a multipurpose project which would provide protection against flooding, a dependable water supply for M&I purposes, recreational lands for future use, and fish and wildlife mitigation. The total project cost is $48,100,000 with benefit/cost ratio of 1.2:1. The project was recommended for construction as proposed by the Chief of Engineers in his 30 May 1980 report.. It was transmitted to OMB on the 25th of April, 1985 by the Assistant Secretary of Army for Civil Works with a recommendation to construct. Parker Lake was authorized for construction by PL 99-88, 15 August 1985, contingent upon the execution of a local cost sharing agreement acceptable to the Assistant Secretary of Army. Both the Oklahoma Water Resources Board and the RedArk Development Authority indicated a willingness to agree to be the non-Federal sponsors. OWRB provided a draft letter of assurance on the 4th of September, 1985, in which it agreed to non-Federal cost sharing as allowed under the provisions of Senate Bill 1567. However, on the 12th of December, 1985, OMB sent a letter to OSA stating that there was no Federal interest in constructing Parker Lake because its flood control benefits were only eight percent of the total benefits. In additional to its authorization by PL 99-88, Parker Lake was approved by the House for construction in 99HR6 and by the Senate in 99S1567.

The Oklahoma Delegation of the Red River Valley Association contends that (1) the OSA recommended the project for construction as a multipurpose project, (2) there exists no authorized criteria or guidelines which allow OMB to declare a project with only eight percent flood benefits a single purpose project and, therefore, there to be no Federal interest in its construction, (3) that Congress declared a Federal interest in Parker Lake by authorizing it for construction in PL 99-88 and subsequently in 99HR6 and 99S1567, (4) that OMB has no authority to direct OSA to not fulfill its responsibilities as established by acts of Congress. We therefore request Congress to authorize Parker Lake for construction in such a manner that its intent will be carried out by the OSA, and (2) to provide funds in the amount of $950,000 in FY '87 to complete on-going planning and engineering on this project.

The second project with an unique status is the Red River Chloride Control Project. Congress authorized construction of this project with PL 89-789 and PL 91-611, with removal of natural pollution as a Federal responsibility and the removal of man-made pollution a responsibility of non-Federal interest.. The local sponsors have faithfully kept their word and executed their side of the agreements. Both the States of Texas and Oklahoma have expended millions of dollars to control the man-made pollution. Therefore, we fully believe the non-Federal role is being achieved and will continue to be strengthened. However, now the Federal Government is reneging on its word and agreements to make the necessary investments to construct the project in order to control the natural pollution.

The Federal government began construction of the Red River Chloride Control Project in accordance with the authorizing legislation and the official agreements with the local sponsors. However, in February of 1982, the Assistant Secretary of the Army for Civil Works notified the local sponsors that non-Federal financing of a major portion of the natural pollution control project would be required to proceed with the construction of the remaining clemments of the project.. Once the Federal government began construction of the Red River Chloride Control Project, the signed agreements of 1976 and 1978 between the Federal government and non-Federal sponsors became binding.

This project is greatly needed by the citizens of Oklahoma, Texas, Arkansas and Louisiana. Water in the 94,000 square mile Red River Basin is polluted by sodium chloride to the point of severely limiting its use. It is obvious that this project is of major importance not only to the area but also to the nation. There is definitely a national interest in cleaning up the waters of such a major national resource. We therefore strongly request that the Secretary of the Army immediately forward the report which he is holding on this project to OMB with a favorable recommendation for the initiation of construction on the remaining areas and that the Corps of Engineers receive 100 percent Federal funding in the amount of $10,000,000 to initiate construction on Areas VI and X in FY '87.

I thank you for this opportunity to share with you my concerns about the development of our Nation's most vital resource, its water.

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Mr. **Duggan**. Thank you, Bill.

Our next witness will be Mr. Homer Tanner. He is our Vice President from Texas.

Mrs. **Boggs**. Mr. Chairman, excuse me, Mr. Tanner, and all of the members of the Red River Association. Congressman Jim Chapman, as you know, who was meeting with us yesterday, expressed his complete approval and confidence in the programs that you all are proposing. He is in the same tradition as former Congressman Hall, and he is supportive of all your efforts. He asked me to express his approval of your testimony and of the projects and also to express his regrets that he has a conflict and is unable to be here. He is here in spirit and will be behind you all the way.

Mr. **Tanner**. Thank you.

My name is Homer Tanner, for the record. We had an earlier meeting with Mr. Chapman, and we are well aware of that sentiment. Thank you so much for expressing it.

Mr. Chairman, and Mrs. Boggs and Mr. Watkins, this is a day I have dreaded for a long, long time, and that is getting up here and following someone like Joe Waggonner. You just can't hardly do it, Joe.

We in the State of Texas want to express our appreciation and express our concern for the entire waterway. We have some things in Texas that have been spoken to before and will be spoken to later. The Corps of Engineers has given you a lot of capabilities. The Red River Valley Association has provided you with a lot of information, the Texas Department of Water Resources has provided you with a lot of information and given you some in-depth analyses.

I would like to suggest at this point in time that for me to give you additional documentary evidence would be kind of foolish. Mr. Bevill, I would like to speak to you because I talked to Mrs. Boggs yesterday, and Mr. Watkins today and yesterday, and I am kind of like a choir boy singing to the leaders. Those two people know more about what we need and know more about how to get the job done. I would like to ask you, sir, to listen to their pleadings when you begin your deliberations, after such time and put in the information that they know of and they are aware of that is required to get——

Mr. **Bevill**. I assure you, we will do that.

Mr. **Tanner**. They know and we have been advised they know, and they have done a tremendous amount of work in the last year, and we are well aware of it and are highly appreciative of their efforts.

We are requesting funding for projects, the Salt Lake project you just heard about. We have a couple of items that haven't been mentioned, and that is Cooper Lake and Channels. Cooper Lake, as you know, has laid in abatement for many many years, and it is now back in the bill and needs funding. That particular project is going to furnish a great amount of water for a tremendous area in the Dallas Metropolitan area, and it is a project that is needed. Patience and perseverance of the people in the Valley has paid off now, I think, now that that project would be a viable project providing you can give it.

Also the bank stabilization project, we think, is vitally needed. I would like to address the fact that the President has asked us to share in balancing the budget. Those of us in Texas feel we can accept that request and gladly join hands with everybody else in America to accept the budget request and budget lowerings, we just don't want to have a budget request lowered that we feel is deleterious to our projects. We would like to see, even though we may get it, a cut in keeping with the rest of the country. I have been back here now, representing the folks back home, and we have stated the Federal deficit is a matter of major concern to us, and we will go along and comply with that particular part of it.

I am going to close now, because everybody has said a good bit more than I can say, and we appreciate you.

Thank you for listening to us.

[The statement of Homer Tanner follows:]

STATEMENT
OF THE
RED RIVER VALLEY ASSOCIATION(TEXAS)

REGARDING

U. S. ARMY CORPS OF ENGINEERS INVESTIGATIONS AND PROJECTS

IN THE

RED AND SULPHUR RIVER BASINS AND CYPRESS CREEK BASIN

WHOLLY OR PARTIALLY WITHIN TEXAS

PRESENTED TO THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

COMMITTEE ON APPROPRIATIONS

U. S. HOUSE OF REPRESENTATIVES

APRIL 15, 1986

Mr. Chairman, Members of the Committee:

My name is Homer Tanner, I speak to you as the Executive Committee member of the Red River Valley Association from the State of Texas. I am also the Executive Director of the Northeast Texas Municipal Water District, a political subdivision of the State charged with the orderly development of the water resources of a significant segment of North East Texas.

My colleagues and associates have asked that I address you today to summarize our concern for the development of water resource projects in the Red River Valley.

The specific projects we appear here to support have been documented in detail. The Corps of Engineers have provided capabilities and funding levels, the Association has provided additional evidence supportive of the valley's needs, the Texas Department of Water Resources has provided an indepth analysis of the specific requests of Texas' interest and are submitted herewith for inclusion in the record. At this point, I suggest the documentary evidence is overwhelming and for me to review again the specific projects in Texas would be redundant and time wasted.

What has not been documented, however, is the citizen support and effort that has culminated in the Association's presentation here today. With me in the audience are individuals interested in water development that have been; elected - appointed - employed by water related organizations - the business community - the farming community and people who are just plain motivated by a sincere desire to insure adequate water supplies for future generations - to save land from caving - to reduce flooding or to enhance our inland waterway system.

We represent literally thousands of Texans. People whose lives and roots are in these communities. People who are making an effort to provide for the future water needs of their children and grandchildren. Many hundreds of valley residents provided input encapsulated in the presentations we make today.

This region provides the world with pipe products, electronics, computers, energy technology, machine tools and financial resources. . . Our farmers supply the nation with a major production of cotton, grains, cattle, dairy products, vegetables and other foodstuffs. The northern tier of Texas contains a vibrant segment of our nation's economy. Exports of valley products are a significant percentage of our nation's balance of trade. Regional population is growing at a rate matched by few in this great country. Water, it's conservation and development, and the attendant preservation of our soil resources are of paramount importance, both now and for future generations.

We are requesting project funding to enhance water quality thru salt abatement programs that will ultimately result in vast quantities of not now available domestic and agricultural wates the entire length of the river. Flood control measures speak for themselves as do the water supply projects. Bank stabilization and related projects also enhance the entire river and affect all those people we represent plus the many more in our neighboring states with whom we have joined efforts. Navigation of the waterway will provide an economic value to the valley and the nation far beyond a purely dollars and cents analysis - the human values should be given paramount consideration.

There are overriding reasons otherwise set forth by my colleagues here today that speak to the need for continued funding of the navigation feature and we in Texas wish to endorse unequivocally the request for appropriate construction funds. To insure the orderly continuation of the project.

The valley people's patience and perseverance is now beginning to show results as witness the existing navigation locks and dams -- the beginnings of a chloride abatement project -- pre-construction projects on Cooper Lake -- continuing bank stabilization the length of the river, now we ask your continuing support.

The President has asked us all to share in balancing the national budget. We in Texas can accept that request and will gladly join hands with all other Americans of like mind in accepting reasoned budget cuts that would not cause deleterious effects to valuable ongoing projects.

We here, representing the "folks back home" have for the past several years stated our support of the President's and the Congress' desires to reduce the federal deficit, and in a show of good faith, have refrained from requesting funding for frivolous projects asking only for those dollars that can return a benefit to the country.

Thank you for listening to me.

Red River Valley Association(Texas)
Mr. Homer Tanner, Executive Committee
P. O. Box 955
Hughes Springs, Texas 75656
Telephone No. (214) 639-7538
Northeast Texas Municipal Water District

Mr. **Bevill**. A very good statement.

Mr. **Duggan**. Thank you, Homer.

Our next witness is Mr. John Stroud. He is a member of the Red River Valley Association from Arkansas, on the Board of Directors.

Mr. **Stroud**. Mr. Chairman, my written testimony on behalf of Arkansas covers seven projects. I would like to mention just two of them for you today.

One was mentioned specifically by Congressman Anthony. It is actually the reason that the Red River Commission was created. Senator Dale Bumpers, then Governor of Arkansas, had an administration bill to create the Red River Commission to work with the Congress and the Corps of Engineers to stop the bank caving we were having and work toward navigation, comprehensive bank stabilization on the Red.

The next Governor of Arkansas was Governor David Pryor, and he appropriated out first monies to the Red River Waterway trust fund. We don't have a tax base to pay the non-Federal costs, and we have to put it in the bank. Although we are not a rich state, through these years, we have gathered in certificates of deposit over $5 million from the State of Arkansas plus additional monies from the counties and cities and small communities and levied it to have the comprehensive bank stabilization program from Shreveport to Index.

Congressman Anthony mentioned two of the appropriations you had made had gone into slippage. That was for fiscal year 1984, when you appropriated for preconstruction planning $490,000; $400,000 went into savings and slippage. In fiscal year 1985, you appropriated $520,000; and $470,000 went into slippage. We didn't know this until the last moment when we were trying to get an update to see what we needed to finish this planning, and you gave us a zero last year. The 520 was put in in the Senate, but it did not stay in in the Congress.

We are asking you to let us resume this preconstruction planning of the Red River Waterway, Shreveport to Index. We have full support of our area of several Governors, of Arkansas, we have our money, and only two more years are needed to complete the planning. We have lost more to slippage than the cost to finish. $842,000 is all that is needed, and it takes the Corps two years to do it. I know there is time between today and markup, but if you remember anything about Arkansas, when that day comes, please remember $520,000 to let us get on with the final phase of our plan.

The other project I want to mention is emergency bank protection. That is where the bulk of the bank stabilization has been occurring. I began coming here 19 years ago, before we had a Red River Commission, but the levee and levee boards, and farmers would see their farms go in the river. I have become interested in water as a legislative assistant to Senator John L. McClellan, and you will recall his great interest in water back in the early 1960s.

At any rate, for 19 years we have presented and you have listened, and we have had substantial improvements, we have had our second major cutoff completed this past winter, and we thank you for this support. The only way it can continue until we do go into the construction phase of this Shreveport to Index project is for you to continue making appropriations to the emergency bank protection fund.

That is four states, it is not just us, but it is where our help is coming from. We ask you to consider 15,100,000 or reduce it, our fair share of the reductions that you have to make. Just don't take the emergency bank protection money away.

Finally, Congressman Anthony referred to his father-in-law. He has been the Chairman of the Red River Commission since we began. He has been coming here for 40 years, since 1946, when you may remember the beginnings of Millwood Dam were before you, and he tells us this is the last year he is coming. We are going to try to change his mind, but I would like him to stand. He has been a strong voice for water in Arkansas. Mr. Vincent Foster.

Thank you, Mr. Chairman.

[The statement of John F. Stroud, Jr. follows:]

STATEMENT IN BEHALF OF RED RIVER VALLEY INTERESTS IN ARKANSAS MADE BY JOHN F. STROUD, JR., ON APRIL 15, 1986 AT 11:00 A.M. TO ENERGY AND WATER DEVELOPMENT SUB-COMMITTEE ON APPROPRIATIONS, CONGRESSMAN TOM BEVILL, CHAIRMAN

1. Red River Waterway, Shreveport, Louisiana to Index, Arkansas - for continuation of preconstruction planning;
   President's budget request for FY-87 - none
   Our request - $ 520,000

2. Red River Emergency Bank Protection (Louisiana, Oklahoma Arkansas and Texas);
   President's budget request for FY-87 - none
   Our request - $15,100,000

3. Red River Levees and Bank Stabilization Below Denison Dam (Texas, Arkansas and Louisiana);
   President's budget request for FY-87 - none
   Our request - Full Corps Capability

4. Reshaping levees on Red River and Arkansas - for preconstruction planning;
   President's budget request for FY-87 - none
   Our request - $ 500,000

5. Red River Bank Stabilization, Index, Arkansas to Denison Dam, Texas (Arkansas, Oklahoma and Texas) for resumption of preconstruction planning;
   President's budget request for FY-87 - none
   Our request - $ 350,000

6. Red River Below Denison Dam, Comprehensive Basin Study (Arkansas, Louisiana, Oklahoma and Texas) for continuation of planning
   President's budget request for FY-87 - none
   Our request - Full Corps Capability

7. Red River Waterway, Mississippi River to Shreveport, Louisiana - to continue construction;
   President's budget request for FY-87 - $38,000,000
   Our request - Full Corps Capability

GENERAL STATEMENT

On behalf of the Red River Commission of Arkansas, as its attorney, I wish to thank the members of this Committee for the opportunity to again express the concerns, needs and priorities of funding from the Congress to continue the orderly development of the Red River Valley in Southwest Arkansas.

Nineteen years ago, the bank caving in Southwest Arkansas accelerated to such an extent that the levee boards in that area banned together to form an association to present testimony to the Congress with a united voice. At that time, some of the upstream dams in Arkansas and Oklahoma had been completed which greatly alleviated the threat of floods, but which rapidly accelerated the bank caving due to the river remaining at one-half to two-thirds bank full for long periods of time. Since that time upstream dams known as Millwood, Gillham, Dierks and De Queen have been completed which have further reduced the threat of flooding, but which have accelerated the bank caving even more.

The State of Arkansas became concerned at this rapid irreparable loss of the most fertile farm land in Southwest Arkansas and thirteen years ago created the Red River Commission upon the recommendation of then Governor, but now Senator Dale Bumpers. The Commission was vested with the authority to furnish the local cooperation necessary for the construction and study of projects and to coordinate with the Corps of Engineers and the Congress to develop the water resources of the Red River in Arkansas. Southwest Arkansas is fortunate to have an abundance of water, rich soil and timber resources, but we vitally need the assistance of Congress to continue the bank stabilization projects for the preservation of these natural resources.

RED RIVER WATERWAY PROJECT, SHREVEPORT, LOUISIANA, TO INDEX, ARKANSAS

The Congress has funded preconstruction planning for this comprehensive bank stabilization program for several years for the reach of the river from Shreveport, Louisiana upstream to the Arkansas-Texas boundary at Index, Arkansas, but no appropriation was made last year. Although much needed stabilization work in certain areas has been performed with funding by the Emergency Bank Protection and Red River Below Denison Dam projects, only through the completion of preconstruction planning and then construction of this comprehensive bank stabilization program can the loss of valuable farm land be brought to a conclusion. The

Corps of Engineers has estimated that over 1,000 acres of farm land is lost each year in this reach of the river due to bank caving. A typical example is the farm of Dan York in Little River County, Arkansas. His home, headquarters and shop are less than 300 yards from the eroding bank, but were more than a mile away before the upstream dams were constructed. He loses about 15 acres per year to the river and will lose his home, headquarters and shop in a very few years if the river is not stabilized.

Tens of thousands of dollars have been contributed by the four counties bordering the Red River in Arkansas and by the towns and communities within those counties and over five million dollars has been placed in the Red River Waterway Trust Fund by the Arkansas General Assembly to meet the non-federal costs required upon construction of this project. The Red River Commission is continuing full speed ahead in its efforts to have the non-federal costs in hand when the preconstruction planning is completed so that construction can begin in an orderly manner without great delay. Only two more years of continued preconstruction planning will be required before the Corps of Engineers will be in a position to proceed to the construction phase.

Not only will this project end the loss of some of the nation's most valuable resources, which this country can ill-afford to waste, but substantial benefit will accrue to the navigational project downstream which is presently under construction. The farm land is now washed downstream only to form worthless sand bars and place tremendous amounts of silt in the channel, both to the detriment of navigation. We, therefore, request an appropriation of $520,000 during fiscal year 1987 to resume preconstruction planning of this comprehensive bank stabilization program.

RED RIVER EMERGENCY BANK PROTECTION (LOUISIANA, OKLAHOMA, ARKANSAS AND TEXAS) AND RED RIVER LEVEES AND BANK STABILIZATION BELOW DENISON DAM (TEXAS, ARKANSAS AND LOUISIANA)

It is imperative that these two programs continue to be funded to provide bank stabilization works in those portions of the river where the caving is most critical and where valuable land and public facilities such as highways, pipelines and bridges are in danger of destruction and to provide stabilization where that protection is cheaper than repeated levee set backs.

Approximately five years ago, the first cut-off performed on the Red River in Arkansas was completed and is known as Mays Lake Cut-off. The Corps of Engineers just completed the second cut-off last winter which is known as Goose Lake Cut-off and which eliminated a double bend in the river. Funding of the Emergency Bank Protection and Red River Levees and Bank Stabilization Below Denison Dam projects will continue to allow these vital improvements to be accomplished in the areas most critical during the completion of planning still required before a comprehensive bank stabilization program can begin to be constructed. In the summer of 1982, the Red River broke through a narrow strip of land between it and Little River where a water treatment facility is located for the treatment and transmission of pure drinking water to the city of Hope, Arkansas. Repairs are in progress, but certainly preventive bank stabilization works could have been accomplished at a fraction of the cost of those repairs. This is but one example of the necessity for continued funding of these programs to avoid substantially larger costs which will result from delays of funding.

We urge your inclusion of funding of the Emergency Bank Protection and Red River Levees and Bank Stabilization Below Denison Dam programs in the full amount of the capability of the Corps of Engineers for fiscal year 1987.

RESHAPING LEVEES ON RED RIVER IN ARKANSAS

The Corps of Engineers has completed a study indicating that the levees along the main stem of the Red River in Arkansas should be reshaped to conform to the new flow line resulting from the study. The reshaping of the levees will allow a more gentle slope on both sides of the levee to increase their integrity and substantially reduce maintenance costs. The State of Arkansas urges that Congress appropriate the sum of $500,000.00 to initiate pre-construction planning of this project.

RED RIVER BANK STABILIZATION, INDEX, ARKANSAS TO DENISON DAM

Bank caving is not only a serious problem between Shreveport, Louisiana and Index, Arkansas, but it continues upstream between Index, Arkansas and Denison Dam, Texas. The Congress saw fit to initiate preconstruction planning for a comprehensive bank stabilization project in that reach of the river during fiscal year 1984, but it has not been funded for continued study since that year. We join with our sister states of Texas and Oklahoma in urging the reinstatement of this preconstruction planning project recognizing that many years of planning are required before construction of this type project can begin. We hope that an orderly development up Red River can continue in the years ahead for the benefit of the peoples of all four states bordering the Red River. We, therefore, urge you to appropriate the sum of $350,000 to resume this preconstruction planning program during fiscal year 1987.

RED RIVER BELOW DENISON DAM, COMPREHENSIVE BASIN STUDY

We think the administration displayed sound judgment when it included initial funding for a comprehensive study of the entire Red River basin during fiscal year 1984 to include flood control, water supply development, generation of hydro-electric power, development and enhancement of recreational potentials and improvement of the river for navigation and port-site development. The study of hydro-electric power in conjunction with navigation on the Red River will undoubtedly prove of economical benefit if timely studied. We, therefore, urge your approval of the full Corps capability for fiscal year 1987 to continue this comprehensive study.

RED RIVER WATERWAY, MISSISSIPPI RIVER TO SHREVEPORT, LOUISIANA

It is a pleasure for the Red River Commission of Arkansas to join with the State of Louisiana to seek continued funding of the construction and completion of Lock and Dam No. 2 and the continuation of construction of Lock and Dam No. 3. We are well aware of the economic impact that will occur not only to Louisiana, but certainly to Southwest Arkansas when the navigable channel reaches the port of Shreveport, Louisiana. We, therefore, urge your approval of an appropriation of the full Corps capability for fiscal year 1987 for this project.

Mr. BEVILL. Very good.

Mr. DUGGAN. Thank you, John.

The next witness will be Mr. Randall Johnson, and he is a Commissioner on the Red River Waterway Commission.

Mr. JOHNSON. I am Randall Johnson, from in the heart of the Red River project. Being a life-long resident of the Red River Valley, I can assure you of the value and potential of the Red River Waterway project to Louisiana and its citizens. The other accrued benefits to the United States as a whole are the hydroelectric power potentials for this project. The State of Louisiana alone has committed itself to underwrite its cost.

Ladies and gentlemen, this project is too important and has progressed so far that it must be continued for the benefit of the citizens and the country. Transportation on the Red River is essential, and its cost-to-benefit ratio actually justified.

Ladies and gentlemen, there is something else I want to point out to you. The reach of the Red River between Shreveport and Colfax, no work has been done on that stretch of the river. And, again, this year, as in the past several years, there is no money being budgeted for that area, and the following is the reason given for that. There are two other authorized projects on the Red River in Louisiana other than the Red River Waterway project. They are the Red River levee and bank stabilization between Denison Dam and the Red River emergency bank protection. The administration has decided work on these two projects should cease because construction of the Red River Waterway project would accomplish much of the same objective.

At the same time, however, the administration will not allow construction on the Red River Waterway project to proceed beyond pool number 2. The upper reach of pool 2 extends to Colfax, Louisiana, which is the location of lock and dam number 3, which we have talked about here this morning.

This leaves that portion of the river from Colfax to Shreveport abandoned. We don't believe that you will endorse this, nor do we believe it is the intention of the administration to abandon a major portion of the Red River. We have testified for several years that this was happening. The trend reached its conclusion last year, and we are urging again this year that you correct this dangerous situation so that we can have an effective program for controlling the Red River between Colfax and Shreveport.

We have identified 13 project locations for which we are requesting sufficient funding to implement continuing contracts of the work at these locations. We request further that the language of the appropriations bill provide this funding should remain and be available until the completion of these projects. This will require approximately $30 million more than what is in the President's proposed budget for the Red River Waterway project. It is requested the name of these projects be included in the appropriations bill.

A list of the 13 project location names and requested funding for each are outlined in the formal written statement which has been provided to you this morning for the written record. The right of way for several of the above-mentioned jobs have been acquired and were long ago made available to the U.S. Corps of Engineers.

Work on acquiring rights of way for the remaining jobs has begun and can be acquired so that the work can begin in fiscal year 1987.

I want to point out to the members of the subcommittee respectfully that the Red River Waterway Commission in Louisiana has been very active in the pursuit of this project, and we think we are the kind of local sponsors the administration is looking for. In addition to providing rights of way for the project, we have invested a great deal of money and time toward recreational development and have done some construction without Federal funds for which we hope to get reimbursed 50 percent by the Federal Government in accordance with authorized legislation.

The Commission has agreed in principle to provide up-front financing for hydropower development on the Red River provided this is not done under private licenses, and if you will notice, we emphasize that. The hydropower study presented by the Corps of Engineers indicates its feasibility and provides suitable contracts can be drafted with Southwestern Power Administration and provided Congress authorizes the hydropower as part of the Red River project.

This is an aside, I must personally say I have done considerable work in two or three of these areas, especially with the Southwest Power Administration, and it is definitely feasible for them, and it looks like it could be highly possible.

We have been active all along with the local representatives of the business community and port development and taken the lead in urging a reasonable economic development plan be drafted to assure ourselves we are doing everything we can to take advantage of this project.

We are in support of the administrative goal and Congress' goal of reducing the national deficit. We believe that our request is compatible with that goal and that we are going only about two-thirds of as much as was appropriated at the time. We wish to be recorded in support of the basin-wide request made by the Red River Valley Association and representatives of other states in this basin.

What happens on the upper stream of the Red River affects us in Louisiana, and what we do to the river down here in Louisiana affects other members in the upstream states. This is why the Red River Valley exists and is really why the Association that has existed all these years.

We thank you very much for giving us the opportunity to appear, and I want to add a personal note that the State of Louisiana, and I call it the Great State of Louisiana, is in a position to do its part, and we hope we can ask you to do the same. Thank you.

[The statement of Randall Johnson follows:]

STATEMENT BY
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS
RECOMMENDING FISCAL YEAR 1987 APPROPRIATIONS

RED RIVER BASIN

PRESENTED TO: APPROPRIATIONS SUB-COMMITTEES ON ENERGY AND
WATER DEVELOPMENT
HOUSE OF REPRESENTATIVES AND SENATE
APRIL 15, 1986

The Louisiana Department of Transportation and Development, Office of Public Works is the agency designated to represent the State of Louisiana for the coordinated planning and development of water resources including flood control, navigation, drainage, water conservation, and irrigation projects. Therefore, this statement is presented on behalf of the State of Louisiana. We are pleased to present the following endorsements and recommendations for Fiscal Year 1987 appropriations for Louisiana projects in the Red River Basin.

RECOMMENDED APPROPRIATIONS FOR RED RIVER BASIN PROJECTS
FISCAL YEAR 1986

LOUISIANA PROJECTS	BUDGET ALLOWANCE	LOUISIANA REQUEST
Construction		
Red River Emergency Bank Protection	$ -0-	See Commentary Below
Red River Levees & Bank Stabilization Below Denison Dam	-0-	See Commentary Below
Red River Waterway, Mississippi River to Shreveport	38,000,000	68,000,000
Aloha-Rigolette Area Red River, LA	-0-	7,200,000
Planning		
Red River Waterway, Shreveport, La. to Vicinity of Index, Ark.	-0-	520,000
Red River Waterway, Shreveport, La. to Dangerfield, Texas	-0-	100,000

Operation and Maintenance	Estimated Obligation	Louisiana Request
Bayou Bodcau Reservoir	$ 302,000	$ 302,000
Bayou Pierre	10,000	10,000
Caddo Lake	86,000	86,000
Red River Waterway, Mississippi River to Shreveport	2,262,000	2,262,000
Wallace Lake	136,000	136,000

NOTE: The projects listed above are only in Louisiana and directly affecting the State. We realize that there are others outside of Louisiana that are vitally important to the Basin and we endorse the recommendations of the Red River Valley Association.

RED RIVER EMERGENCY BANK PROTECTION
(Budget: $-0-) (Request: See Commentary Below)

RED RIVER LEVEES & BANK STABILIZATION BELOW DENISON DAM
(Budget: $-0-) (Request: See Commentary Below)

RED RIVER WATERWAY, MISSISSIPPI RIVER TO SHREVEPORT
(Budget: $38,000,000) (Request: $68,000.00)

The above three (3) projects comprise the only mechanism for controlling the last major river basin in the United States remaining to be developed. Both the Red River Waterway Project and the Red River Emergency Bank Protection Project were authorized by the River and Harbor Act of 1968; Red River Waterway Project basically for navigation and the Red River Emergency Bank Protection basically for bank stabilization. The Red River Levees and Bank Stabilization Below Denison Dam project is an older project and is the only comprehensive flood control program on the Red River.

Over the past few years, the administration has required the U.S. Army, Corps of Engineers to systematically phase out the first two (2) of these projects in the state of Louisiana, leaving only the Red River Waterway Project funded in the state. The Corps has complied. There was no money appropriated for these two (2) projects last year and there is none budgeted this year and no capability to use any is shown by the Corps of Engineers. This was done because it was thought that many of objectives of these two (2) projects would be accomplished by construction of the third, the Red River Waterway Project.

The Administration, however, has now also decided that construction ont he Red River Waterway Project should not proceed beyond pool two (2) of the five (5) pool project. This leaves the reach of the river from Colfax, Louisiana to Shreveport, Louisiana without any operational or funded program for controlling and developing the river.

Thirteen (13) project locations for which we are requesting sufficient funding to implement continuing contracts have been identified. It is further requested that the language of the appropriations bill provide that funding remain available until completion of these projects. This will require thirty (30) million dollars more than what is in the President's budget for the Red River Waterway Project. It is requested that the names of the projects be included in the appropriations bill.

ALOHA-RIGOLETTE AREA, RED RIVER, LA
(Budget: -0-) **(Request: $7,200,000)**

This project, initially authorized in 1941 and constructed during the period of 1948-54, provides for the protection of some 58,000 acres of alluvial land during high states of the Red River. Drainage from 340,000 acres that must flow through protected areas during lower river stages is diposed of by gravity flow through 2 to 10 feet by 10 feet gated concrete drainage structures in the levee at the lower end of the project. The protected area has continued to flood and it has now been determined by the U.S. Army, Corps of Engineers, that six (6) additional gates are needed.

It is requested that $300,000 for continued engineering and planning and $6,900,000 for construction be appropriated for this project in Fiscal Year 1987.

NAME	FUNDING
Deloges Bluff Realignment	$ 2.5 million
St. Maurice Realignment	2.5 million
Cognac Revetment	2.5 million
Kadesh Realignment	2.5 million
Lock & Dam III, Phase 2C	2.0 million
Socot Realignment	3.0 million
Powhatten Realignment	3.0 million
Isle Au Vaches Realignment	3.0 million
Carroll Realignment	3.0 million
Wilkerson Point Realignment	3.0 million
Lumbra Revetment	1.0 million
Campti Realignment	1.0 million
Smith Island Realignment	1.0 million
TOTAL	$30.0 million

If the above projects cannot be funded under the Red River Waterway project, then they should be funded under the more appropriate of the other projects.

RED RIVER WATERWAY, SHREVEPORT, LA. TO VICINITY OF INDEX, ARK.
(Budget: $-0-) **(Request: $520,000)**

The Red River Waterway, Shreveport to Index reach is an important part of the authorized project. We urge that the $520,000 be appropriated to continue planning in this area.

RED RIVER WATERWAY, SHREVEPORT, LA. TO DANGERFIELD, TEXAS
(Budget: $-0-) (Request: $100,000)

Similarly, the Red River Waterway, Shreveport to Dangerfield reach is an important part of the authorized project. We urge that $100,000 be appropriated to continue planning in this area.

The State of Louisiana, its Office of Public Works, in particular, wishes to commend the Appropriations Sub-Committees on Energy and Water Development and express our appreciation for the foresight and understanding exhibited in the past of the need for authorizing adequate levels of appropriations for water resources projects which are vital to the national interest. We solicit your further consideration of the recommendations presented herein.

Submitted by: STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS

MARTY J. CHABERT
ASSISTANT SECRETARY

ARTHUR R. THEIS DEPUTY CHIEF ENGINEER	CURTIS G. PATTERSON ASSISTANT CHIEF ENGINEER FOR WATER RESOURCES	COAN BUECHE CHIEF, FEDERAL PROJECTS

Mr. DUGGAN. Thank you, Randall.

Don Jones has been doing an outstanding job as Mayor of Bossier City. He is a newcomer with us this year and a staunch supporter of our project. He is our next witness.

Mrs. BOGGS. Mr. Chairman, I would like to recognize Mr. Rhodes, the Mayor of Colfax, who is with us this morning.

Mr. BEVILL. Good to have both of you with us.

Mr. JONES. We appreciate the funding the Red River Waterway project has received in previous years. Obviously we are here again to request additional funding. I shall not belabor the points.

However, I would reflect back on the previous testimony about the benefits of the waterway navigation project. I would tell you the Red River Basin lies in the heart of the 56 county and parish corridor, an L-shaped corridor, that begins in Central Oklahoma down through Texas and across Louisiana, and this corridor was responsible for 24 percent of the real economic growth in the United States from 1970 to 1982.

The waterway project is not just a local project, it has national significance. To improve the competitive position of industry against foreign imports, enhancing opportunity for future expansion and additional employment, is one of the targets and goals of this waterway project. The additional interaction in commerce made possible by waterways, such as the proposed Red River Waterway, is evidenced in other parts of this country where such a tool has been provided.

The Gulf South Research Institute and the Corps of Engineers have conducted studies to denote the national benefits to be derived from the waterway project listed here. It does not have just local impact, it is not just jobs for Louisiana or Oklahoma or Texas or Arkansas, but it is jobs for America. Competitive transportation rates allow area manufacturers and their trading partners in Illinois, Pennsylvania, Indiana, Ohio and other states to continue trading with each other while enhancing participation in a global economy through the ports of New Orleans and Houston.

We do not ask for a subsidy, we don't ask for an exemption. We are asking for a tool for American industry to gain a competitive edge on a global economy. Our people have proven that they will work, they provide the oil and gas to fuel this nation's economy, and we will continue working. We ask for your help, and we appreciate your time.

Thank you, sir.

[The statement of Don E. Jones follows:]

STATEMENT OF SUPPORT

FOR CONTINUED FUNDING OF

THE RED RIVER WATERWAY PROJECT

PRESENTED TO:

THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS

PRESENTED BY:

MAYOR DON E. JONES
BOSSIER CITY, LOUISIANA

APRIL 15, 1986

RED RIVER WATERWAY PROJECT

Bossier Parish, Caddo Parish and 56 other parishes and counties extending from north central Oklahoma, by way of central and southeast Texas to the Louisiana and Mississippi Gulf Coasts, generated twenty-four (24) percent of the nation's real economic growth from 1970 to 1982. Imbedded within this economic growth area is the Red River Region that is the site of the proposed Red River Waterway Project to be addressed here.

This waterway will be similar to the McClellan-Kerr project on the Arkansas River in regard to economic development contributions such as users' reduced costs of operation and services, and other benefits such as generation of jobs associated with navigation, recreation, electric power production and flood control.

Additionally, the Red River Waterway will provide improved competitive positions for industry, allowing area manufacturers to compete in the global economy against foreign imports while enhancing domestic opportunity for future expansion and added employment not only in the Red River Region but throughout the United States. Thus, such a project could fairly be termed "America's Project".

The Project's construction has been justified by the U. S. Army Corps of Engineers showing that the economic benefits to the nation will be greater than the cost of constructing the Waterway.

The Red River Waterway Commission has provided a study of economic benefits to the Red River Region that would result from the construction of the Waterway. Using the high growth scenario, it is estimated that by the year 2020, the annual increase in business activity will be over $1.7 billion and an annual increase of over 15,000 jobs. The high growth scenario is probable given an active and coordinated economic development effort.

It was determined that the industries most likely to iniate an economic upswing on completion of the Waterway are: agricultural commodities (production or use of), ores, coal, lignite, sand/gravel, chemicals, petroleum and related products, iron/steel products and large machinery. The Red River Region supports crop and timber production, oil and gas extraction and mining of lignite.

However, the real benefit of this project can be realized if invisioned as "America's Project". The import flood taking place through the ports of Houston and New Orleans with foreign trading partners is the trend of the future. If America is to take a prominent position in the world economy, our manufacturers must be given the tools to compete. A more competive position in regard to transportation costs is such a tool and can enhance employment domestically, not only in the Red River Region, but also in states like Indiana, Illinois, Ohio, Michigan, Pennsylvania, Missouri, and Kentucky where wire, steel, cement and other products are manufactured and shipped into other parts of this country.

The additional interaction in commerce made possible by waterways such as the proposed Red River Waterway, is evident in other parts of the country where such a tool has been provided. Given the economic slump that Louisiana and the Red River Region is experiencing now, we take particular exception to the policy decision about the value of this project and request that we are allowed the same opportunities for economic development in this region as enjoyed in other parts of our nation.

While expressing our deep appreciation for past considerations, we vigorously request continued funding on this project for America.

OFFICE OF THE MAYOR
SHREVEPORT, LOUISIANA

JOHN HUSSEY
MAYOR

POST OFFICE BOX 31109
SHREVEPORT, LA 71130
(318) 226-6250

April 10, 1986

Senate & House Subcommittees
For Energy and Water Developments

Honorable Members of Congress:

I appreciate this opportunity to join with delegates from the Red River Valley Association in addressing you on the critical issue of promoting water projects that will clean, control and provide more beneficial uses of the Red River.

Red River navigation is critical to the future economic development of this area. In a letter dated March 20, 1985 to you, I discussed the need for such a navigation project. In that letter, I praised the initiation of Lock & Dam 3 and the scheduled implementation of Lock & Dams 4 & 5. A year has passed and the outlook is not as bright as I painted in that letter. Lock & Dam 3 has not been started. Lock & Dams 4 & 5 are not under a healthy implementation schedule at the present time.

The City of Shreveport has undertaken a very serious and aggressive study of economic development for this area. Our consultants, Mt. Auburn & Associates and Belden Daniels, created for us a multi-initiative program, which would, in the long term, bring economic health to northwest Louisiana. One of the prime features of this study was creating a distribution center in Shreveport by enhancing our transportation mediums. A major component of our economic recovery efforts is based on the opening of Red River for navigation. Although I am quite aware of the severe budgetary restraints which you and we as municipalities now face, I'm again requesting your serious consideration of this project because of the economic impact which it offers.

As always, I appreciate the opportunity to address the Senate and House Subcommittees for Energy and Water Developments, and urge your support for this most worthwhile project.

Sincerely,

John Hussey

John Hussey
MAYOR

JH/kb

Mr. **Waggonner**. Mr. Chairman, could I say something right here?

Some of us have a past, and this young man has a future. He has got it.

Mr. **Bevill**. Good. We are glad to have you with us.

Mr. **Duggan**. Our next witness is Mr. Prestridge. Mickey is the President of the Bossier City Chamber of Commerce. He has been coming with us in years past.

Mr. **Prestridge**. Thank you.

Mr. Chairman, members of the committee. It is a pleasure to appear before you today for two very good reasons. The first reason, and probably the most important, is the fact that the Red River navigation project is a good, viable cost-benefit project. The second reason is that we in our state area of the Red River Valley desperately need this project for our economic growth and viability.

I am pleased to be before you today representing eight Chambers of Commerce that are located along the Red River, from its mouth to the Northern-most reaches, and, Mr. Chairman, with your permission, I would like to introduce copies of letters from those Chambers of Commerce and ask that they be made a part of the record.

Mr. **Bevill**. Without objection, they will be made part of the record.

[The information follows:]

TEXARKANA
"YOUR CAN-DO CITY"

March 25, 1986

Mr. R. M. Prestridge
President
The Bossier Chamber of Commerce
710 Benton Rd.
Bossier City, LA 71111-3797

Dear Mr. Prestridge:

Thank you for your solicitation of Texarkana's position regarding the continued orderly development of Red River. Texarkana and, in fact, the state of Arkansas have always been and will continue to be strong proponents of bank stabilization and navigation of the Red River at least as far upriver as Index Bridge.

This Chamber certainly supports the current administration and the Congress in their efforts to balance the budget and reduce the federal deficit. However, we believe that, with the exception of defense related costs that are necessary for national defense, the cuts in expenditures should be equally distributed. I am quite surprised to learn that nineteen new construction starts have been made in water projects simultaneous with a proposed 60% cut in funding for the River River. As you testify before the Senate and House Committees, be assured you have the full support and concurrence of the Texarkana Chamber of Commerce in requesting continued and uninterrupted financing to complete all locks and dams, bank stabilization and channel realignments necessary to make the Red River navigable from Index Bridge at Fulton, Arkansas to the Mississippi River. We also feel full funding should be made for this project until its' completion and that cuts in water development projects should be achieved by delaying construction on new projects. In the event this is not feasible, we would support a position that funding for the Red River project should not be reduced by more than 9%.

If you need any additional information, please feel free to call on me. I will be happy to contact, at your direction, any members of the Arkansas or Texas delegations regarding this problem.

Sincerely yours,

Swede Lee

ROBERT E. "SWEDE" LEE
Executive Vice President

REL/db

TEXARKANA CHAMBER OF COMMERCE
819 STATE LINE AVENUE P.O. BOX 1468 TEXARKANA, TEXAS/ARKANSAS 75504 214/792-7191

Coushatta - Red River TELEPHONE 932-3289

POST OFFICE BOX 333
COUSHATTA, LOUISIANA 71019
Chamber of Commerce

March 24, 1986

Mr. R. M. Prestridge, President
Bossier Chamber of Commerce
710 Benton Road
Boxxier City, La. 71111-3797

Dear Mr. Prestridge,

This is response to your letter concerning your trip to washington with the RRVA to testify before the Senate and House Subcommittee.

We do not have any specific facts or figures you can quote as to the value of this project to our area. We know that it will bring improvement to our area economy during and long after the construction is completed. We will receive spin-off benefits from the increases it brings to Shreveport and Bossier area and ,of course, we will always be alert for ways to develop an economy around the existence of the active waterway. The recreational facilities will be an immediate benefit to us and an attraction of new business to come to our Parish.

Please tell our leaders that we need this waterway development completed on schedule. To stop at this point make complete waste of money already spent, but to complete this project opens new vistas of development and economic growth.

Thank you for this opportunity to respond. Good luck on your trip.

Sincerely,

Allen L. Crunkilton
Manager

NATCHITOCHES AREA
CHAMBER OF COMMERCE
318/352-4411

The Oldest Town in the Louisiana Purchase
Natchitoches
CHAMBER OF COMMERCE
1714

POST OFFICE BOX 3
NATCHITOCHES, LOUISIANA
71457

April 7, 1986

Mr. Mickey Prestridge, President
Bossier City Chamber of Commerce
710 Benton Road
Bossier City, Louisiana 71111

Dear Mr. Prestridge:

We have learned of your planned trip to Washington, which is of great interest to Natchitoches.

The Red River Waterways Navigation Project is something our area has looked forward to for many years in hopes that someday it's final destination will become a reality and river traffic will be a major topic of discussion.

Your efforts aimed at the prevention of total deletion of the Red River Waterways Projects is wholeheartedly supported by the Natchitoches Area Chamber of Commerce. We feel completion of the project would have a terrific economic impact on the entire North Louisiana area and the thought of having the project abandoned should be unthinkable.

On behalf of President Pat S. Todd and the Board of Directors of Natchitoches Area Chamber of Commerce, please accept our appreciation for being a champion of the Red River Waterways Navigation project, a #1 priority.

Sincerely,

NATCHITOCHES AREA CHAMBER OF COMMERCE

Betty Jones

Betty (Mrs. Walter C.) Jones
Executive Vice-President

BJ:mm

DAINGERFIELD CHAMBER OF COMMERCE
1502 Coffey• Daingerfield, Texas 75638 • 214 / 645-2646

April 7, 1986

R.M. Prestridge
Bossier City Chamber of Commerce
710 Benton Road
Bossier City, La. 71111

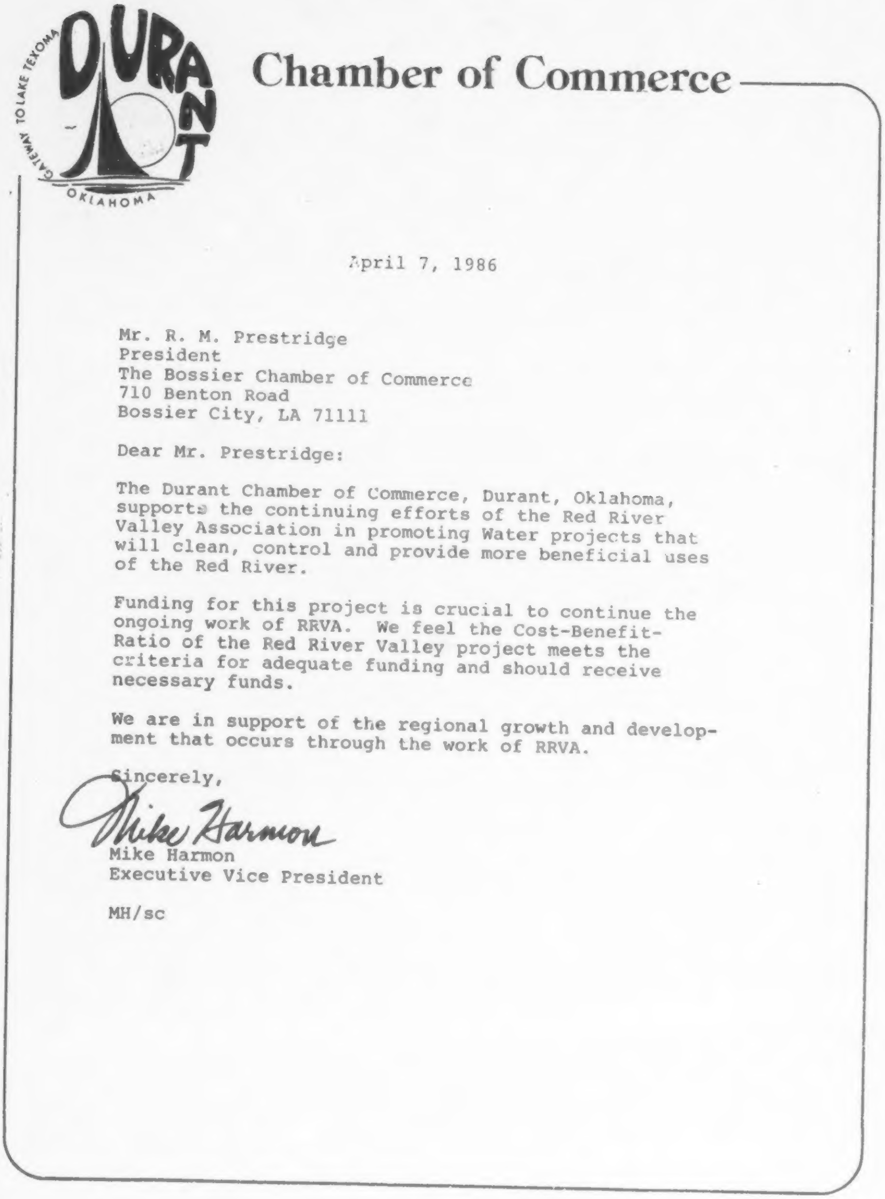
Dear Mr. Prestridge,

I am writing this note in support of the Red River Waterway Project. I feel that any stoppage of this project at this time would be detrimental to the area.

Sincerely,

Cindy Bockmon

Cindy Bockmon, Pres.



DURANT
GATEWAY TO LAKE TEXOMA
OKLAHOMA
Chamber of Commerce

April 7, 1986

Mr. R. M. Prestridge
President
The Bossier Chamber of Commerce
710 Benton Road
Bossier City, LA 71111

Dear Mr. Prestridge:

The Durant Chamber of Commerce, Durant, Oklahoma, supports the continuing efforts of the Red River Valley Association in promoting Water projects that will clean, control and provide more beneficial uses of the Red River.

Funding for this project is crucial to continue the ongoing work of RRVA. We feel the Cost-Benefit-Ratio of the Red River Valley project meets the criteria for adequate funding and should receive necessary funds.

We are in support of the regional growth and development that occurs through the work of RRVA.

Sincerely,

Mike Harmon
Mike Harmon
Executive Vice President

MH/sc

The Greater Alexandria / Pineville Chamber of Commerce

802 Third Street Post Office Box 992 Alexandria, La. 71309-0992 Telephone (318) 442-6671

March 24, 1986

Mr. R. M. Prestridge
President
710 Benton Road
Bossier City, LA 71111-3797

Dear Mr. Prestridge:

The Red River Project has not only provided economic benefits to our region, state and nation, but has provided confidence and faith to a region that has one of the highest unemployment rates in the Nation.

You have the economic benifits of the project as provided by the Commission so I will not detail those here.

The City of Alexandria has spent $3.5 million for the construction of an industrial park adjacent to the future Port of Alexandria. Because of the Port, a 700 acre private development is underway. An estimated $10 million will be spent to make this project successful.

The Port of Alexandria is underway with fill work almost completed with an investment of $2,309,000.00 by the Red River Commission and an additional private investment of $600,000.00 in adjacent property. The Port, when complete, will require an additional investment of $11 million. A marketing study will be complete by LSU within two (2) months at a cost of $30,000.00. Work on the first phase of the Port, will be $2.5 million. A Port Authority will be created to complete the project and insure its success.

Our small community, as you can see, has and is investing millions of dollars in this project at a time when local revenues are small. Our faith in the completion of this project is the major reason for this investment. Without completion of this project to Shreveport, the investment will not be realized.

We wish you success and if I can help in any way, please do not hesitate to call.

Sincerely,

John M. Stroud

John M. Stroud, C.C.E.
Executive Vice President

JMS/rt

Getting right to the heart of things!

Mr. Prestridge. These letters express their sincere interest in the continuation of this project. It is our sincere belief that the cost-benefit ratio that has been given to the Congress and to the Office of Management and Budget is grossly understated. We feel and we know that we are ready to make substantial investments in the project locally. We have made substantial investments locally.

The Caddo-Bossier Report Commission, with state and local funds, has invested some $4.5 million in the acquisition of land and facilities in preparation for Red River Navigation. The City of Alexandria has spent $3.5 million on an industrial park adjacent to the Red River. They have invested over $2.5 million for the development of a port site. There is a private investment that is on the drawing board in Alexandria that they anticipate spending over $10 million for development of industrial land for, to be tied in with the navigation project.

So we feel that we are making a substantial investment on our own, and as Joe says, we know you have treated us fairly in the past, and we just sincerely hope we will be treated fairly in the future. We are not here for special favors, we will take our cuts with everyone else, but please don't cut us out. We desperately want to show that we will meet you half way. We will do our part if you will help and bring the water to us.

We thank you so very much for the opportunity of visiting with you, and we look forward to seeing you next year.

[The statement of Caddo/Bossier Port Commission follows:]

CADDO/BOSSIER PORT COMMISSION
P.O. BOX 1983, SHREVEPORT, LOUISIANA 71166 318/747-5290

STATEMENT IN SUPPORT OF
THE RED RIVER NAVIGATION PROJECT

submitted by the

CADDO-BOSSIER PARISHES PORT COMMISSION

to the

ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEES ON APPROPRIATIONS

of the

UNITED STATES HOUSE OF REPRESENTATIVES

and

UNITED STATES SENATE

APRIL 10, 1986

**MEMBERS: Claud H. Grace, President / Sinclair Kouns, Vice President
Frank Blackburn, Treasurer / John S. Turner, Jr., Secretary
Robert G. Harris / Rogers M. Prestridge / Aaron Selber, Jr.**

CADDO/BOSSIER PORT COMMISSION
P.O. BOX 1983, SHREVEPORT, LOUISIANA 71166 318/747-5290

The members of the Caddo-Bossier Parishes Port Commission add our wholehearted support and endorsement of the 'Red River Valley Association' Program of Work for Fiscal Year 1987, and respectfully request that the Subcommittees on Appropriations submit to the full House of Representatives and the Senate a recommedned appropriation reflective of the amounts requested by the Red River Valley Association for the various projects cited in their 1987 Program of Work.

This request is made by the Caddo-Bossier Port Commission based upon the numerous overall benefits which will accrue to Northwest Louisiana, Northeast Texas and Southwest Arkansas from the completion of the Red River Waterway project — namely, navigation to the Shreveport-Bossier City, Louisiana, area (of which we are particularly interested); improved availability of clean, potable water; the potential for hydroelectric power generation; improved recreational facilities; and, perhaps most important for our area and our state, the number of construction and permanent jobs continuation of this project will create.

Our area as well as the entire state of Louisiana currently has the highest unemployment rate in the nation. Many of our employers are being forced out of business due to the high cost of doing business and the increased volume of imports coming into this country and this area. The state's largest private employer, AT&T, this past year laid off more than 3,000 workers in our area.

In an effort to remedy some of the ills facing our local businesses and industries, the Port Commission, over the past year, has had the privilege of taking the lead in obtaining a Customs Port of Entry designation for Shreveport-Bossier City. In addition, we are now in the process of preparing an application for a Foreign Trade Zone, which will be utilized by AT&T to reduce its costs of operation sufficient enough so that it can manufacture its products internationally on a more competitive basis.

As a result of our efforts pertaining to the Customs Port of Entry and the Foreign Trade Zone we have uncovered a wealth of information proving the vital need that exists locally for water transport of goods. Today, more than 80 manufacturers in the three state Ark-La-Tex area import some 4,000 individual shipments a year, with a weight of more than 91,000 tons, and a value of more than $482 million. Our area's manufacturers account for more than 4,100 individual export shipments, with a tonnage of over 148,513 tons, and a value of over $40 million. A vast majority of the tonnage moving through this area is from steel and other heavy components, such as sand, used by our Libbey Glass plant — products which could more economically be shipped via water than by rail or truck.

The members of the Caddo-Bossier Port Commission fully realize that our nation faces urgent economic problems, and that funding for all programs must be designed with certain constraints in order to develop a federal budget with the lowest

MEMBERS: Claud H. Grace, President / Sinclair Kouns, Vice President
Frank Blackburn, Treasurer / John S. Turner, Jr., Secretary
Robert G. Harris / Rogers M. Prestridge / Aaron Selber, Jr.

possible deficit. At the same time, the Port Commission members believe the Red River Valley Association has requested funding which meets this criteria, and therefore, we urge you to provide a funding level sufficient to allow the completion of the Red River Navigation project at the earliest possible time.

Below we have provided information which briefly outlines some of the many benefits which will accrue to this area with the completion of the Red River Navigation project. We ask that you consider these factors as you develop your recommendation for Fiscal Year 1987 funding for the continuation of the Red River Navigation project

SPECIFIC BENEFITS ACCRUING TO NORTHWEST LOUISIANA, NORTHEAST TEXAS AND SOUTHWEST ARKANSAS UPON COMPLETION OF THE RED RIVER NAVIGATION PROJECT

(Information derived from Feasibility Study prepared by Tippett-Abbett-McCarthy-Stratton and Port Users Survey prepared by Griswold Engineering Company.)

POTENTIAL TRIBUTARY AREA

Boundary limits

1. 60 miles east of Shreveport-Bossier City.
2. 110 miles north of Shreveport-Bossier City.
3. 70 south of Shreveport-Bossier City
4. 220 miles west (to Dallas-Ft. Worth)

Demographics

1. Land Mass composed of 39,000 miles, covering 53 counties and parishes in Louisiana, Texas, Arkansas and Oklahoma.
2. 6,000 manufacturing establishments in tributary area; more than one-third have 10 or more employees.
3. Shipment of goods by these manufacturers were worth more than $12.1 billion, including more than $5.7 billion in value added.

POTENTIAL TONNAGE

1. 1,890,350 tons of general cargo (total firms contacted: 217; responses from 65) through public port facilities.
2. 1,641,418 tons through private terminal.

DIRECT ECONOMIC BENEFITS

1. Transportation savings for shippers or consignees.
2. Creation of an estimated 4,000 new jobs.
3. Total direct benefits of from $4 million to $6.9 million.
4. Indirect benefits of multiplier effect estimated at $16 million.
5. Provide possible expansion of local companies in export markets.
6. Aid in aleviating highest unemployment rate in nation.

Mr. Bevill. Very good.

Mr. Duggan. This concludes our testimony. Thank you for hearing us so patiently, and help us all you can.

Mr. Bevill. We certainly will, and we appreciate you all. We appreciate your fine presentations, each of you.

At this time the chair recognizes Mr. Watkins.

Mr. Watkins. I strongly support the entire development. But I would like to ask, does each state support this co-op controlling effort we are trying to make?

Mr. Duggan. All of them.

Mr. Watkins. Louisiana, Texas and Arkansas?

Mr. Duggan. Yes.

Mr. Watkins. Secondly, we have feasibility studies going on as to the total development of the Red River, and that is including the feasibility of navigation all the way up into the Lake Texoma area. Does each of the states here give full support to that project?

Mr. Duggan. Yes, sir, we do.

Mr. Prestridge. Until death do us part.

Mr. Watkins. All four states are fully supportive of that. I thank you very much for that and ask to be excused to go to the other room.

Mr. Bevill. Very good. Thank you very much.

[The following statements were submitted for the record:]

STATEMENT OF
THE HONORABLE W. HENSON MOORE
BEFORE THE HOUSE COMMITTE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

APRIL 15, 1986

THANK YOU MR. CHAIRMAN FOR ALLOWING ME TO TESTIFY TODAY ON THE RED RIVER WATERWAY IN LOUISIANA. THE RED RIVER WATERWAY IS AN IMPORTANT ASSET FOR OUR NATION AND MY STATE WHICH WHEN COMPLETED WILL CREATE OVER 15,000 JOBS AND OVER $1.7 BILLION WORTH OF NEW INDUSTRY.

THE ENTIRE RED RIVER WATERWAY MUST BE COMPLETED TO FULLY DEVELOP LOUISIANA'S AND THE NATION'S ECONOMIC POTENTIAL. AS I AM SURE YOU ARE AWARE LOUISIANA IS CURRENTLY FACING THE HIGHEST UNEMPLOYMENT IN IN THE NATION. OUR TWO MOST IMPORTANT INDUSTRIES, AGRICULTURE AND OIL AND GAS, ARE DEVASTATED. WE ARE NOT ASKING FOR HANDOUTS; OUR CITIZENS ARE WORKING TO REBUILD OUR ECONOMY, BUT WE NEED THE ECONOMIC TOOLS TO HELP OURSELVES.

THE 16 PARISHES OF THE RED RIVER AREA ARE LARGELY UNDEVELOPED, BUT POSSESS EXCELLENT RESOURCES. WITH THE VALLEY'S COMBINATION OF RAW MATERIALS, TRANSPORTATION AND PEOPLE, A NEW INDUSTRIAL CORRIDOR WILL BE CREATED FOR OUR NATION CREATING NEW JOBS AND REVENUES. IN A PERIOD OF INCREASED FOREIGN COMPETITION, WE CANNOT AFFORD TO LET OUR ASSETS LIE IDLE.

THE RED RIVER WATERWAY IS NOT SOMETHING EPHEMERAL IN THE FUTURE, THE RED RIVER WATERWAY IS NOW. LOCK AND DAM #1 IS ALREADY COMPLETED AND LOCK AND DAM #2 WILL BE FINISHED NEXT YEAR. IF WE CONTINUE FULL FUNDING THE ENTIRE PROJECT WILL BE COMPLETE BY 1995--JUST 9 YEARS FROM NOW. THE STATE AND THE RESPECTIVE LOCAL GOVERNMENTS ARE COMPLETELY COMMITTED TO THIS PROJECT AND HAVE ALREADY PROVIDED THEIR SHARE. WE WOULD WASTE MANY OF THE BENEFITS OF THE $650 MILLION WE HAVE ALREADY INVESTED IF WE DO NOT COMPLETE THIS VITAL PROJECT.

THE RED RIVER IS A VIABLE AND ECONOMICAL PROJECT. THE OVERALL BENEFIT/COST RATIO IS 1.7 AND THAT IS NOT EVEN CONSIDERING THE HUNDREDS OF SECONDARY BENEFITS FROM THIS PROJECT. THE RED RIVER WATERWAY IS WILL PROVIDE WIDE BENEFITS TO LOUISIANA, TEXAS, AND ARKANSAS AND HELP BUILD THE OVERALL INFRASTRUCTURE OF THE UNITED STATES.

THE RED RIVER WATERWAY IS A NATIONAL PROJECT THAT DESERVES NATIONAL ATTENTION AND SHOULD BE EXPEDITED AS QUICKLY AS POSSIBLE. MR. CHAIRMAN I AND THE REST OF LOUISIANA ASK THAT YOU ONLY COMPLETE WHAT WAS PROMISED US BACK IN 1968.

STATEMENT OF THE HONORABLE BILL ALEXANDER TO THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, COMMITTEE ON APPROPRIATIONS, U. S. HOUSE OF REPRESENTATIVES, REGARDING THE FISCAL YEAR 1987 BUDGET FOR THE U. S. CORPS OF ENGINEERS -- CIVIL WORKS

April 15, 1986

MR. CHAIRMAN and Members of the Subcommittee, thank you for giving me the opportunity to present this statement concerning the Fiscal 1987 budget for the U.S. Corps of Engineers -- Civil Works, as that budget relates to First Congressional District of Arkansas, which I represent.

Because of the time constraints under which the Subcommittee is operating and the extensive witness list with which you are dealing, I will summarize my requests. My written statement provides additional information on these projects.

But, first, I want to thank the Subcommittee for the time, energy and dedication you expend on behalf of the American people each year as you carry out your tasks. Additionally, I want to state that while, in the natural course of events, there are instances in which I disagree with decisions made by the Corps of Engineers, or which are imposed on them by the Office of Management and Budget, I believe the Little Rock, Memphis and Vicksburg Districts, which have responsibilities in First District of Arkansas, are providing superior service to our people.

SUMMARY OF REQUESTS

With regard to the Corps Fiscal 1987 budget for projects in First District, I am supporting requests for funding which are being made by the Lower Mississippi Valley Flood Control Association as those relate to First Congressional District of Arkansas. And, I am making additional requests for work in First District.

In summary, my requests for funding in addition to that proposed in the President's budget include:

1. DeValls Bluff Pumping Station	$200,000
2. West Memphis, Arkansas, and Vicinity	$325,000
3. St. Francis River and Tributaries, Black Fish Bayou	$300,000
4. St. Francis River and Tributaries, Honey Cypress Creek Channel	$200,000
5. St. Francis River and Tributaries, Oak Donnick Floodway	$250,000
6. St. Francis River and Tributaries, Ditch 12, Arkansas Channel	$100,000

Additionally, I have two requests for report language. I urge that there be included in the report on the Fiscal 1987 energy and water development appropriations bill, language encouraging the Corps of Engineers and other interested agencies to work as expeditiously and cooperatively as possible in resolving the remaining questions relating to the presence of the fat pocketbook pearly mussel in the St. Francis River and Tributaries project area. And, I urge that report language be included directing the Corps of Engineers to use existing statutory authorities for developing and implementing a streambank stabilization demonstration project in the Clover Bend reach of the Black River in Arkansas.

DEVALLS BLUFF PUMPING STATION -- The $200,000 I am requesting for this project would be used to renovate the flood control pumps located at the City of DeValls Bluff, Arkansas. The investment made now in these pumps would be a good deal for the federal government because such renovation would extend the effectiveness of these pumps for many years. Without the investment at this time, the government will face the cost of purchasing and installing new pumps to replace those already in place on which the renovation can be accomplished. Should these pumps fail during a period of high water many homes, at least one church, the majority of the DeValls Bluff business section and a reach of an important federal highway will be flood damaged. It has been estimated that had these pumps failed during the extreme high water period on the White River in 1983, the federal highway alone would have been flooded to a depth of three feet.

WEST MEMPHIS, ARKANSAS, AND VICINITY -- The $325,000 which I am requesting for this project is for continuation planning and engineering which is and has been underway for some years. This project is primarily located within the City of West Memphis and is designed to prevent or reduce flooding in major residential areas and in commercial areas. Authorization for construction of this project is included in the House and the Senate passed water project bills now awaiting conference.

BLACK FISH BAYOU -- The $300,000 which is being requested for this portion of the St. Francis River and Tributaries would permit the Corps to relocate three Crittenden County bridges which must be moved in order to carry-out the project design at this location.

HONEY CYPRESS CREEK -- The $200,000 requested for this portion of the St. Francis River and Tributaries project will permit the Corps to move ahead with the efforts to improve flood damage protection in Mississippi County.

DITCH 12, ARKANSAS CHANNEL -- The $100,000 being requested for this item of the St. Fancis River and Tributaries project will make it possible for the Corps to continue the work of providing flood damage protection in Mississippi County.

OAK DONNICK FLOODWAY -- The $250,000 being requested for use in the Oak Donnick Floodway portion of the St. Francis River and Tributaries project is necessary for making changes in a railroad bridge to permit the project's design to be implemented in this area of Poinsett County.

FAT POCKETBOOK PEARLY MUSSEL LANGUAGE -- In the 1970's a contractor for the Corps of Engineers, working on the St. Francis River and Tributaries project discovered the presence of a freshwater shellfish in one reach of the river channel. Work in this area came to a halt when the shellfish was identified as the fat pocketbook pearly mussel which had been designated as an endangered species. Since that time the livelihood of thousands of people in this region has been endangered by repeated flood damages to farm crops because of the difficulties in resolving the fat pocketbook pearly mussel issue. These shellfish have been identified in at least one other reach of the river where flood control work has already been carried out.

Working with interested federal, state and local groups, the Corps has developed a plan for resolving the flood damage protection work stoppage caused by the discovery of the mussel. This plan needs to be implemented and completed as expeditiouly as possible so that the threat now clouding the present and future of the people of the basin is removed as quickly as possible.

BLACK RIVER - CLOVER BEND LANGUAGE -- My request for language in the report directing the Corps of Engineers to develop and implement a streambank stabilization demonstration project is based on the urgency of the situation at this location and the extensive Black River streambank erosion problem existing in Lawrence County. At the Clover Bend location, the erosion is threatening an improved county road which provides the only route, during years of heavy rains, available to farmers moving crops, valued at more than $1.6 million, to market. The erosion problem at this location is one of at least five the Corps of Engineers has identified on the Black River in Lawrence County. It is the most urgent because of the impact loss of the county road would have on the economy of a wide area.

In addition to the projects already identified, I want to take particular note of some other projects in First District for which the President submitted a budget request.

EASTERN ARKANSAS REGION COMPREHENSIVE STUDY -- The budget request for this project is $700,000. This study is well underway. The area involved contains approximately 11,680 square miles of land located in all or parts of Clay, Greene, Lawrence, Jackson, White, Craighead, Poinsett, Cross, Woodruff, St. Francis, Mississippi, Lonoke, Pulaski, Jefferson, Arkansas, Monroe, Desha, Phillips, Lee and Crittenden Counties. It also involves seven counties in southeast Missouri. The drainage basins included are those of Bayou Meto, Lower White River, Cache River, Big Creek, L'Anguille River and the St. Francis River below Wappapello Lake, Missouri. It is directed at determining whether modification of water projects in these areas is needed for conservation and enhancement of surface and groundwater supplies for municipal, industrial and agricultural purposes.

The study is being conducted at the same time as a 26-county water conservation study is being conducted by the U.S. Soil Conservation Service, through the Arkansas Soil and Water Commission, thus the information gained in each study is being made available to the other study group to insure against unnecessary repetition and to ensure that maximum value is obtained from the information being gathered.

L'ANGUILLE RIVER, ARKANSAS -- The budget request for this project is $655,000. The project is well underway. Working with the local sponsor, the Corps has made excellent progress toward resolving flood damage problems located in this basin.

EIGHT-MILE CREEK -- The $350,000 requested in this budget would fund construction work on flood control measures along Eight-Mile Creek in Greene County. This project will provide protection for a major section of the commercial district of Paragould, residential areas in the city, and agricultural lands adjacent to the city.

HARBOR MAINTENANCE -- The budget requests $410,000 for operation and maintenance of Helena, Arkansas, harbor and $533,000 for operation and maintenance of the Osceola, Arkansas, harbor. These two harbors are of vital importance to the First District.

They provide essential links in the transportation system serving the farmers, factories and businesses on which or in which thousands of people in the First District earn their livelihoods. Corps maintenance of the river harbors and channel at these locations is crucial to the continued operation of the Osceola and Helena ports.

JACKSONPORT, ARKANSAS LEVEE -- At my request, this subcommittee earmarked funding for the restoration and improvement of the White River levee at Jacksonport, Diaz and adjacent areas following devastating flooding early in this decade. I want to report that the Corps moved quickly to implement this project in full cooperation with the people of Jacksonport, Diaz and Jackson County. I am glad to report that the project is complete.

CLINTON, ARKANSAS, FLOOD CONTROL PROJECT -- At my request, this subcommittee earmarked funding for a flood control project for Clinton and adjacent areas after the Little Red River and its tributary went on a rampage in the early 1980s and devastated this area. The Corps worked quickly to implement this project and I am advised that due to favorable weather conditions, work may be completed before the end of summer, well a head of the target date.

ST. FRANCIS RIVER BASIN BELOW WAPPAPELLO LAKE, MO. & AR. -- The Corps of Engineers has published its Comprehensive Study, Feasibility Report and Environmental Assessment relating to control of seepage in the vicinity of the St. Francis and Little River floodways. This is one of a series of studies which have been conduted in this region of the St. Francis basin. This study and previous urban flooding studies made under this project are of special importance to southeast Craighead County where Whiteman's Creek has been involved in urban flooding in Jonesboro, the largest city in First Congressional District.

TUESDAY, APRIL 15, 1986.

MISSISSIPPI RIVER-GULF OUTLET

MISSISSIPPI RIVER-BATON ROUGE TO THE GULF

MISSISSIPPI RIVER OUTLETS AT VENICE

MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LA

GULF INTRACOASTAL WATERWAY, LOUISIANA-TEXAS SECTION

WITNESSES

HERBERT R. HAAR, JR., ASSISTANT EXECUTIVE PORT DIRECTOR, PORT OF NEW ORLEANS

SAM GIALLANZA, CONSULTANT, NEW ORLEANS STEAMSHIP ASSOCIATION

CAPT. JACQUES MICHELL, PRESIDENT, ASSOCIATED BRANCH PILOTS FOR PORT OF NEW ORLEANS

Mr. BEVILL. Next we have Mr. Herbert Haar. Mrs. Boggs is going to preside.

Mrs. BOGGS. [presiding.] We are very, very pleased to have you with us. We are very happy, Mr. Haar, that you are again representing us so well, and, Sam, I must tell you that we are sorry about the circumstances that bring you back here. But we are certainly glad to see you and look forward so much to your testimony. Mr. Michell, we are pleased to have you here to represent the pilots for the Port of New Orleans, and we welcome you proceeding with your testimony as you will.

I must tell you that we are rather short of members today because Joe Addabbo, our colleague, is being buried today, and many of the members of this committee, who happen to be chairmen of other subcommittees, have gone to attend the funeral, as has Mr. Whitten, the chairman of our full committee. We also have members filling in for other people, and Mr. Myers is there as well. So we are very sorry that there are so few of us, but we will indeed all be reading your testimony, and we are very grateful to you for your appearance. You may proceed as you wish.

Mr. HAAR. Madam Chairman, we are delighted you are chairing the subcommittee. We know of your great interest in our projects, so we look forward to the testimony with you in the chair. Madam Chairman, I am Herbert Haar, Jr., the Assistant Executive Port Director for the Port of New Orleans. I am here to testify in behalf of the Board of Commissioners of the Port of New Orleans, the local government on projects of vital interest to the development of Louisiana and neighboring Gulf states, the mid-America states and the nation as a whole.

I have a prepared statement, Madam Chairman, I would like to place in the record, but in the interest of time, I would like to talk primarily from some computer graphics since we are really dealing with navigation on the Mississippi River, the Mississippi River Delta outlet and the national and regional interests and economics.

I think these graphics will tell the story very vividly, and I would like to start in the back where it is indicated "Section 2," the plain piece of paper, the sheet immediately behind that, which says, the one page, "Statistical Data Lower Mississippi River."

I think it is very interesting to note, I am sure you are well aware—that this river is 2350 miles long from starting point, and that is the third longest river in the world after the Nile and the Amazon, it has a watershed area of a million-and-a-quarter square miles, and that it drains 31 contiguous states in the U.S. and two provinces of Canada, takes in 41 percent of the contiguous land area of the U.S.

Then I would like to go to the front of my booklet, on page two, and then just go through each of those charts quickly in turn, which I think kind of sets the stage for the economic impact and importance of the trade and commerce moving in the Lower Mississippi River.

The first chart, on page two, is the United States and Lower Mississippi River foreign waterborne commerce and shows the trend for calendar years 1974 to 1984. We have a total of 136 million tons moving in the latest year, a record from the Corps statistics, and from the note on the side, you will note the Lower Mississippi River consistently handles approximately one-fifth of the nation's foreign waterborne commerce, which I think is a very significant fact when we look on the national interest question.

If you will turn to page three, this shows our principal trading partners, the two pie charts that are shown on the left and the right show the tonnage on the left by world area, and then the dollar value, and you can see that our principal trading partners are Europe, Asia, Central America, Africa, South America, and dollar value, and that Europe is the largest, followed by Asia. Then on the bottom of those two charts, under each one, you see the principal countries, Japan being the leader on tonnage, and the Netherlands, second, and then for the dollar value, Japan has the largest dollar value. I think it was almost $3 billion worth of trade, and the total value of the foreign trade that we do is almost $28 million.

We turn to the next chart on page four where you see how our import and export ratio breaks out. We have almost 40 million tons in imports, largely made up of crude petroleum and various ores, and the exports consist of just over 96.5 million short tons with grain, with 64 million tons making up the largest segment.

If we go to page five, we see the Lower Mississippi River grain exports, again a series of bar graphs showing the trend for calendar years 1968 to 1985, and you see the millions of short tons that go out, some 50 million short tons shipped in 1985 that were shipped.

If you go to chart six, you see the Lower Mississippi River grain exports as a percentage of the U.S. total for the calendar years 1968-1985. You see it has been pretty consistently between around 40 to 50 percent; the latest year of record, 1985, it was 50 percent of the nation's total grain exports left from the Lower Mississippi River.

Then if you go to chart seven, you see the coal shipments that go out of the Lower Mississippi River in 1975 to 1980. I might note that figure peak in 1981 is when the U.S. enjoyed nationwide a big boom, but we have seen an increase in the past year with 1985 showing a rise up in the vicinity of eight million tons going out of the area.

The treatment on page eight shows the states in mid-America that ship grain that go out from the Lower Mississippi River. You can see that we truly may have mid-America with most of those states represented, and on the coal exports, you can see there is some seven states that ship coal that leave the country via the Lower Mississippi River.

And then on the bottom of that page there is, on the left, impact of a 45-foot channel, which is one of the items that we have recommendations in for funding for the coming fiscal year. This would only have about a $37 million cost initially, and we see the large benefits of $67 million in annual transportation savings, and we also note 30 percent of the vessels on the Lower Mississippi River are light loaded due to existing project draft limits. And on the right side you see the advantages of the 50-foot channel even larger.

If we go to page nine, we see the Port of New Orleans total waterborne commerce as assigned by the Corps of Engineers, and we see how that is trended and how the latest year—we have 154 million tons.

If we go to page 10, we see the number of vessel passengers that go through the Mississippi River Gulf outlet and how that has increased over the period that channel has been in operation, so it is now climbing up into around 1750 vessels—passengers a year.

And page 11 shows the trend of the foreign waterborne commerce, 1950 to 1984. Generally it has been upward. In 1984, you see the figure of some 43 million short tons there.

And then, in conclusion, Madam Chairman, I would like to summarize several recommendations, as shown from the front page of my testimony summary sheet of our specific recommendations. I think this background I have just given you is the economic impact and the economic justification to the nation as a whole from maintaining the existing navigation, improving the navigation in the Lower Mississippi River and the Mississippi River Gulf outlet.

On the Mississippi River ship channel, Baton Rouge to the Gulf, we recommend that $9 million under Construction General be appropriated, the amount in the President's budget, to allow a start on the 45-foot channel, which the Corps tells me that they can have done. Two contracts are prepared to let in July if the state does their part. So we can have that 45-feet to New Orleans by the end of this calendar year.

The second item, Mississippi River, Baton Rouge to the Gulf, maintenance dredging, stabilization, we recommend $33,225,000 under O&M general, the amount in the President's budget, but we also recommend an additional $6,430,000 be added to that equal to the total capital of $39,655,000, which would be the requirement to maintain the additional maintenance dredging requirements for a deepened Mississippi River, which is anticipated to come on line 31 December this year.

The Third item is Mississippi River-Gulf Outlet, maintenance dredging. We recommend that the Congress authorize the full capability of $6.14 million, the same amount in the administration's budget.

The fourth item is Mississippi River, Baton Rouge to Gulf of Mexico, bank nourishment. We recommend continued improvement of the structures comprising the training works of Southwest Pass which could decrease and will decrease annual maintenance dredging costs. We endorse the $19.4 million in construction funds included in the President's fiscal year 1987 budget, but also reference the $9 million of full capability for this. As you know, there is well over $200 million in deficiency in this area. We think we need to move as quickly as possible to correct the deficiencies in that.

The fifth item, Mississippi River-Gulf Outlet, the new ship lock, we recommend $2 million in construction funds proposed for the new ship lock essential to completion of the lock reevaluation studies and initiation of general design studies. This is the corps capability.

The sixth item is Mississippi River Outlets at Venice, Louisiana, a project that is largely complete. We recommend the administration's proposed $2,252,000, equal to the Corps capability, for continued maintenance of these critical east-west navigational channels.

And the final item is the Gulf Intracoastal Waterway, Louisiana and Texas Section. We urge continuation of the funding in the amount of $625,000 to determine the advisability of deepening and widening the project segment from New Orleans to Brownsville, Texas.

Madam Chairman, this concludes my part of the testimony. With your permission, I would like to call next on Sam Giallanza, a consultant with the New Orleans Steamship Association, to make a few brief remarks.

[The statement of Herbert R. Haar, Jr., follows:]

OFFSET
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PORT
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April 15, 1986

Summary of testimony of the Board of Commissioners of the Port of New Orleans by Herbert R. Haar, Jr., Assistant Executive Port Director, before the House Appropriations Subcommittee on Energy and Water Development on Tuesday, April 15, 1986, in reference to the following projects:

1. MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LA.
   We recommend that this deepening project be expedited in order to hasten receipt of enormous benefits that will materialize. We recommend that Congress appropriate $9,000,000 under Construction, General. This amount in the Administration's FY 87 proposed budget is the same as the Corps' capability and will allow completion of a 45 foot deep channel from the Gulf to New Orleans.

2. MISSISSIPPI RIVER, BATON ROUGE TO THE GULF, MAINTENANCE DREDGING, STABILIZATION
   We urge that Congress appropriate $33,225,000 under O&M General, the amount in the President's budget, and an additional $6,430,000 to equal the total Corps' capability of $39,655,000 required to maintain a 45 foot channel.

3. MISSISSIPPI RIVER-GULF OUTLET (MR-GO), LA., MAINTENANCE DREDGING
   We recommend Congress to authorize the full capability of $6.14 million, the same amount as contained in the Administration's FY 87 Budget.

4. MISSISSIPPI RIVER, BATON ROUGE TO GULF OF MEXICO, LA., BANK NOURISHMENT
   Continued improvement of structures comprising the training works of Southwest Pass could well decrease annual maintenance costs. We endorse the $19.4 million in construction funds included in the Administration's FY 87 Budget for continuing the design and construction of these critical projects; plus, we urge an additional $9.0 million to match the Corps' full capability so as to expedite the completion of these vital works.

5. MISSISSIPPI RIVER-GULF OUTLET, LA., NEW SHIP LOCK
   The $2.0 million construction funds proposed for the New Ship Lock are essential to the completion of lock reevaluation studies and initiation of general design studies. This amount matches the Corps' capability.

6. MISSISSIPPI RIVER OUTLETS AT VENICE, LA.
   This project is essentially complete. We recommend the Administration's proposed $2,252,000 equal to the Corps' capability for continued maintenance of these critical east-west navigational channels.

7. GULF INTRACOASTAL WATERWAY, LOUISIANA & TEXAS SECTION
   We urge continuation of general investigation funding in the amount of $625,000 to determine the advisability of deepening and widening project segment from New Orleans to Brownsville, Texas.

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PORT OF NEW ORLEANS
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April 15, 1986

Testimony of Herbert R. Haar, Jr., Assistant Executive Port Director, Board of Commissioners of the Port of New Orleans, before the House Appropriations Subcommittee on Energy and Water Development on April 15, 1986:

Mr. Chairman:

I am Herbert R. Haar, Jr., Assistant Executive Port Director of the Port of New Orleans. I am here to testify on behalf of the Board of Commissioners of the Port of New Orleans, a unit of local government of the State of Louisiana, on projects of vital interest to the development of Louisiana and neighboring Gulf States, the Mid-America States, and the Nation as a whole.

As this testimony was being prepared, we in the Lower Mississippi River regional port complex have watched with great anxiety the debates in the House and Senate concerning the issues confronting the future development of the nation's water resources. Compounding the problem of reaching accord on the issues of cost-sharing, capital funding, cargo diversion, local-share reimbursements, and others are the broader ones of mounting budget deficits and the continuing enormous trade inbalances. Throughout the port industry, the years 1985 - 1986 represent a major milestone in the resolution of conflicting interests hindering the continuing development of our U.S. port and supporting inland navigation systems. The time has come for all of us to jointly address the needs of this nation's foreign waterborne commerce.

In the past 20 years, foreign trade as a proportion of the United States Gross National Product has increased substantially from 5.4 percent in 1960 to 10 percent in 1974, and to approximately 25 percent in 1983. In fact, foreign trade has been and is today a sustaining force behind our country's growth. Today that trade is as vital to the well-being of our country as it was in the early formative years. With 21 percent of the nation's foreign waterborne commerce passing through the ports of Louisiana, the State of Louisiana, has had a profound influence on employment, plant construction, and access to worldwide marketplaces.

When it comes to markets ––– access to foreign markets coupled with minimum transportation costs ––– that is where our Louisiana ports do have an advantage. In order to handle the waterborne commerce, hundreds of barge lines serve our nation's inland waterways. In the Lower Mississippi River region over 100,000 barges pass through the port annually, handling the waterborne commerce of the area. To carry the cargo between New Orleans and its trading partners throughout the world ––– serving, for example, more than 150 countries ––– approximately 4,100 vessels operated by more than 100 steamship lines call at the port in a year's time. These trading partners and percentage of trade are Europe (37%), Asia (29%), Africa (14%), Central America (11%) and South America (8%). According to Lloyd's MARAD Data Services' reports for the first 6 months of 1985, New Orleans and the Lower Mississippi River region ports led all U.S.

seaports in dry bulk vessel arrivals with 1,173. The port complex was third, behind Houston and New York, in tanker arrivals with 733.

It is undeniable that the New Orleans area plays a vital role in the international commerce of this nation. In 1984, the lower Mississippi River (Baton Rouge to the Gulf of Mexico) handled 136 million tons of foreign waterborne commerce. Worth $28 billion, this cargo represented 16% of the nation's international waterborne trade. Bulk cargo accounted for 94% of this volume, primarily the result of tremendous grain and animal feed exports and petroleum imports. More specifically, over 2.0 billion bushels of grain coming from 17 states and representing 44.4% of all U.S. grain exports entered the world market via the eleven grain elevators and midstream transfer capabilities on the lower Mississippi River. This same port complex received 14 million tons of crude petroleum in 1984, 8% of the U.S. waterborne imports of that commodity.

Also in 1984, the Port of New Orleans handled 43.9 million tons of foreign cargo worth $13.1 billion (included in lower Mississippi River statistics). Of this amount, general cargo tonnage totalled 7.8 million tons (major commodities: iron and steel products, rice, paper products, coffee and crude rubber). Although the volume of bulk cargo statistically dwarfs the amount of general cargo handled, the significance of the port in the movement of general cargo should not be overlooked. The Port of New Orleans consistently ranks in the top five general cargo ports in the country. Furthermore, per ton, general cargo is very valuable to the community as it produces a greater economic benefit than does bulk cargo.

While the port's foreign market is worldwide, its domestic market is primarily mid-America, the heartland of the United States. This heartland region currently produces 60% of the nation's agricultural products, ½ of all its manufactured goods, and 90% of the country's machinery and transportation equipment. Waterborne commerce from this region is projected to reach 900 million tons by the year 2000.

Essential to our national economy is the continued growth and development of the lower Mississippi River regional port complex. We strongly feel that this growth is being inhibited by the lack of an adequate deep-water channel of 55 foot depth required by the larger vessels presently engaged in world commerce. For example, executives of Toepfer International of Hamburg, Germany, reported to our visiting commissioners that the company transports three to five million tons of grain annually from the lower Mississippi. This quantity is out of a total of 50 million tons handled worldwide by Toepfer. Their vessels are Panamax, averaging 70,000 tons and, therefore, do not require more than 40 feet of water. However, the 40 feet must be guaranteed. Therefore, in view of annual silting of southwest pass, the port should provide a 45 foot channel in order to guarantee 40 feet year-round. They report that when negotiating prices because of springtime silting problems in the lower Mississippi, they quote about $10 - 11 per ton during April-May, compared to their normal quotation of $8.50 to $8.75.

Today, most major trading nations of the world have deep draft ports and are in the process of developing more. While only five percent of U.S. ports are deeper than 40 feet, 30 percent of Japan's ports are deeper than 40 feet. Similarly, 19 percent of Australia's ports and 16 percent of France's ports are deeper than 40 feet. A recent Booz-Allen & Hamilton, Inc. analysis concluded that of the total U.S. trade tonnage, 40 percent could use deeper draft ports. (Crude petroleum - 75%; grain - 26%; coal - 66%; etc.)

Mr. Chairman, for the reasons we have stated, we strongly urge that the Corps be funded to their full capability of $9,000,000 in Construction, General, for the Mississippi River Ship Channel, Gulf to Baton Rouge, Louisiana (55 foot channel). This amount will allow completion of a 45 foot deep channel from the Gulf to New Orleans and will provide an initial sharpening of our competitive edge in the world-wide grain and coal markets. (As you know, our state is working closely with the Army Corps of Engineers in the drafting of a Letter of Agreement for the cost-sharing provisions for this project.)

The Port of New Orleans continues in maintaining its position as one of the nation's largest ports with a total of foreign and domestic waterborne commerce tonnage of approximately 154 million tons while the Port of Baton Rouge, located 125 miles upriver, is the fifth port in the nation. Both port complexes are entirely dependent upon timely and adequate dredging of the Southwest Pass to provide access to the Gulf. Judging from past experiences with spring thaws bringing higher river stages and higher rates of siltation, we feel that the proposed budget of $33,225,000 is adequate but must be increased by the amount of $6,430,000 to $39,655,000 total required for maintaining the 45 foot channel after December 1986.

We are equally concerned with maintaining adequate depths and channel widths in the Mississippi River-Gulf Outlet Channel. In 1983, the waterborne commerce handled on the MRGO generated $239,140,000 in direct economic impact. Total (direct and indirect) economic impact of the MRGO in 1983 was $380,450,000. Although maintenance costs on this project cannot be related to any shoaling rate but more to severity and intensity of unpredictable Gulf storms, we believe that funding in the amount of the Corps full capability of $6,140,000 will be adequate and so recommend. Incidentally, in 1984 the 1,707 vessels calling on the MRGO Tidewater facilities accounted for 37% of the general cargo tonnage handled over public facilities at the Port of New Orleans.

The foreshore dikes, bank nourishment, and bulkhead features of the Mississippi River, Baton Rouge to Gulf of Mexico, project are vital to the navigation channel below Venice, Louisiana and in the Southwest Pass. We see a tremendous return on investment in the form of decreased maintenance costs and project depth reliability. For these reasons we urge an additional $9.0 million in construction funding over and above the $19.4 million contained in the Administration's Budget.

The $2.0 million construction funds proposed for the Mississippi River-Gulf Outlet, New Ship Lock project are also essential at this time for the continuation of the reevaluation studies.

The operation and maintenance features of the Mississippi River Outlets at Venice, Louisiana are fundamental in providing safe and essential offshore support access to energy-related industries. We strongly recommend that the $2,252,000 equal to the Corps' capability be approved for continued maintenance of these critical east-west navigation channels.

Finally, we urge continuation of general investigation funding to determine the advisability of deepening and widening that segment of the Gulf Intracoastal Waterway from New Orleans to Brownsville, Texas. The requested amount is $625,000. This study addresses our concerns over bank erosion, saltwater intrusion, and required improvements for the safety and efficiency of the waterway.

Mr. Chairman, this concludes my statement. Thank you.

North America
New Orleans
South America
Europe
USSR
Africa
China
Australia

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TRADE STATISTICS
CHARTS, GRAPHS AND BACKGROUND INFORMATION

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SUPPLEMENTAL GRAPHICS FOR
TESTIMONY BY HERBERT R. HAAR, JR.
PORT OF NEW ORLEANS
BEFORE THE ENERGY & WATER DEVELOPMENT
SUBCOMMITTEES ON APPROPRIATIONS
U. S. SENATE AND HOUSE OF REPRESENTATIVES
APRIL 1986

PREPARED BY: Marketing Division
Port of New Orleans

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INDEX

SECTION ONE: CHARTS AND GRAPHS

Page 1 The National Impact of the U. S. Seaport Industry

Page 2 The United States and the Lower Mississippi River
Foreign Waterborne Commerce
Calendar years 1977-1984

Page 3 Lower Mississippi River Foreign Waterborne Commerce
Calendar Year 1984
By World Area and Principal Countries

Page 4 Lower Mississippi River Foreign Waterborne Commerce
Principal Commodities
Calendar Year 1984

Page 5 Lower Mississippi River Grain Exports (Short Tons)
Calendar Years 1968-1985

Page 6 Lower Mississippi River Grain Exports (Market Share)
Calendar Years 1968-1985

Page 7 Lower Mississippi River Oceangoing Bituminous Coal Shipments
Calendar Years 1975-1985

Page 8 Lower Mississippi River: Mid-America's Gateway to the World
U. S. Sources of Grain and Coal
Benefits of a 45 Foot Channel and a 50 Foot Channel

Page 9 Port of New Orleans Foreign Waterborne Commerce
Calendar Years 1950-1984

Page 10 Mississippi River Gulf Outlet Vessel Passages
Calendar Years 1966-1984

Page 11 Port of New Orleans Total Waterborne Commerce
Calendar Years 1965-1984

SECTION TWO: BACKGROUND INFORMATION

Lower Mississippi River Statistical Data

Port of New Orleans Statistical Data

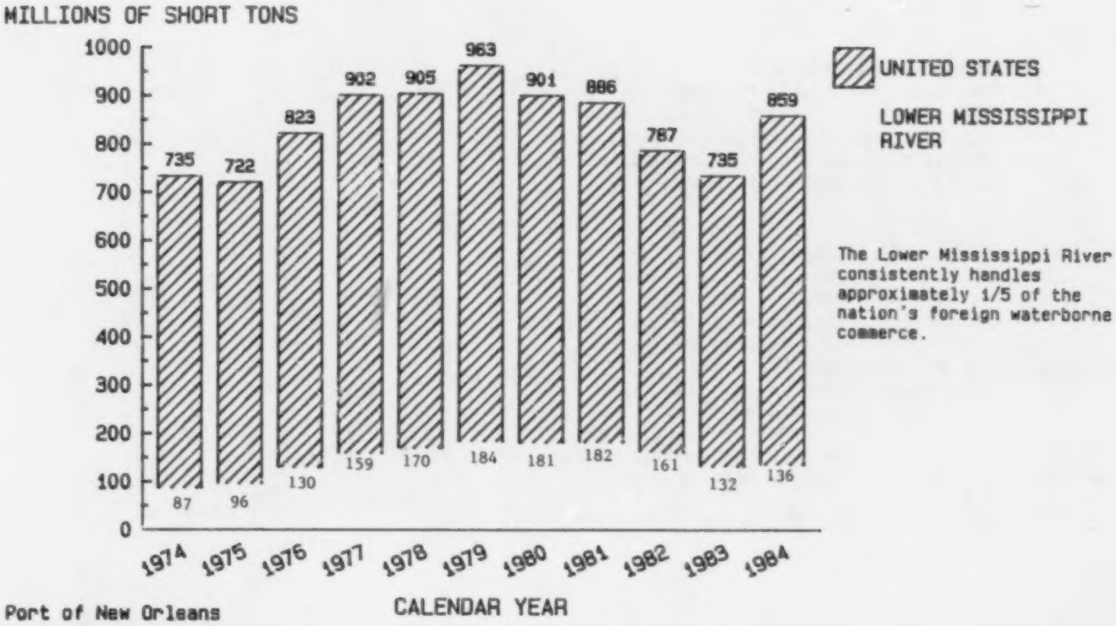
THE NATIONAL IMPACT OF THE U.S. SEAPORT INDUSTRY

The U.S. seaport industry has a tremendous impact on our national economy. In 1982 alone, it generated:

. more than one million jobs
. $70 billion in gross sales
. $35 billion of the Gross National Product
. $23 billion in personal income
. $10 billion in federal taxes
. $5 billion in state and local taxes
. $6.4 billion in customs revenues, and
. $1.5 billion towards the U.S. balance of payments.

The marine terminals that form the cornerstone of the U.S. seaport industry are almost totally the result of private sector and local port authority investment. In 1982, the cash value of these terminals was $59.6 billion with a replacement value of $78.3 billion.

UNITED STATES AND LOWER MISSISSIPPI RIVER
FOREIGN WATERBORNE COMMERCE
CALENDAR YEARS 1974 - 1984

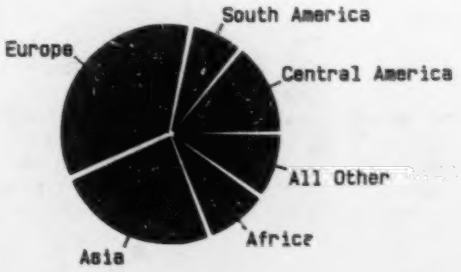


The Lower Mississippi River consistently handles approximately 1/5 of the nation's foreign waterborne commerce.

Port of New Orleans
Marketing Division
April 3, 1986

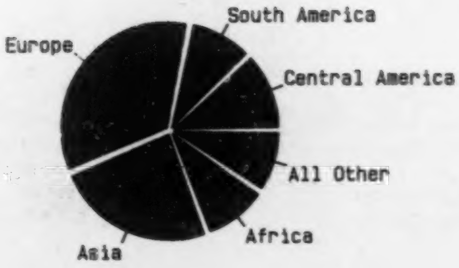
SOURCE: U.S. Department of Commerce

LOWER MISSISSIPPI RIVER
FOREIGN WATERBORNE COMMERCE
CALENDAR YEAR 1984



Tonnage**
By World Area

PRINCIPAL COUNTRIES:	
JAPAN	16,231
Netherlands	10,794
Soviet Union	9,888
Mexico	7,598
Venezuela	4,710
All Other Countries	87,082
TOTAL	136,303



Dollar Value***
By World Area

PRINCIPAL COUNTRIES:		
Japan	$	2,977
Netherlands		2,251
Soviet Union		1,362
Mexico		1,218
United Kingdom		1,088
All Other Countries		18,918
TOTAL	$	27,814

*Includes Mexico and the Caribbean
**Thousands of short tons
***Millions of dollars

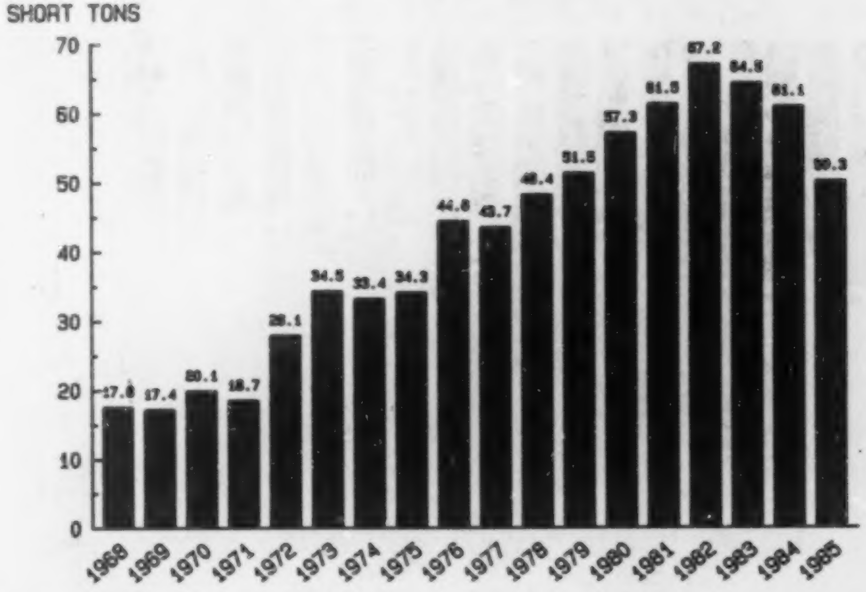
SOURCE: U. S. Departmemt of Commerce

Lower Mississippi River
Principal Commodities
Calendar Year 1984

IMPORTS	39,702,000 Short Tons
Crude Petroleum	13,783,000
Metalliferous Ores	6,894,000
Iron & Steel	4,440,000
Lubricating Oils	3,151,000
Crude Minerals & Fertilizers	3,056,000
All Others	8,378,000

EXPORTS	96,601,000 Short Tons
Grains (unmilled)	64,176,000
Animal Feeds	10,794,000
Bituminous Coal	6,247,000
Manufactured Fertilizers	2,530,000
Coke, Pitch, Anthra Oil	1,811,000
All Others	11,043,000

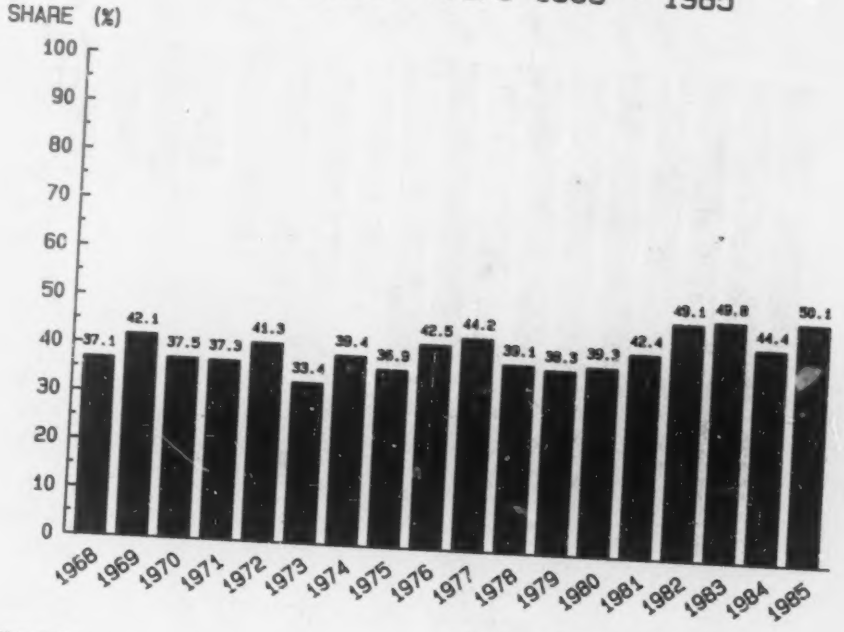
Lower Mississippi River Grain Exports
In Millions of Short Tons
Calendar Years 1968 - 1985



Port of New Orleans
Marketing Division
SOURCE: USDA (converted from bushels to tons)

NOTE: The Lower Mississippi River is the major geographical area for U. S. grain exports.

Lower Mississippi River Grain Exports
As a Percentage of the United States *
Calendar Years 1968 - 1985

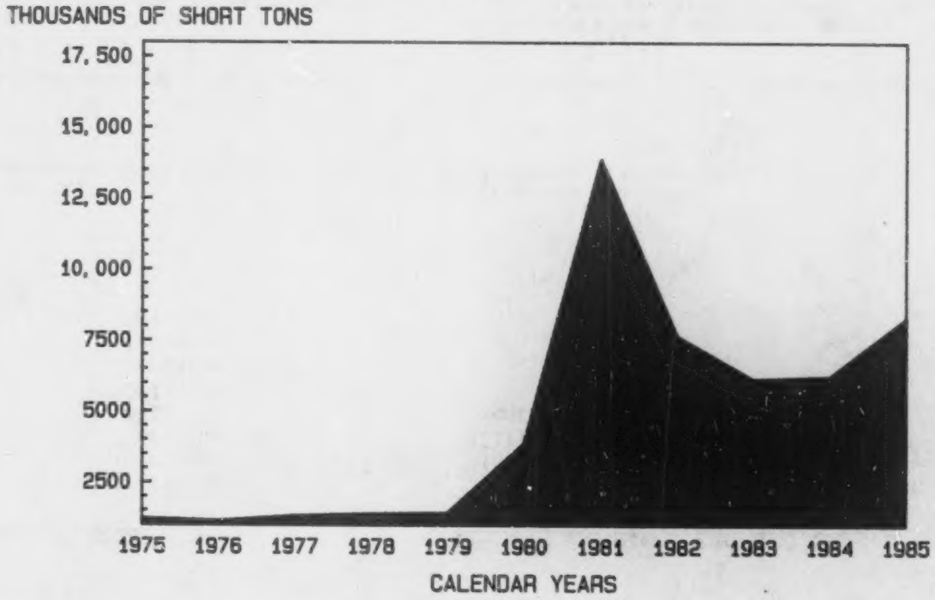


Port of New Orleans
Marketing Division

* Market Share Based on Bushels

SOURCE: U.S. Department of Agriculture

Lower Mississippi River
Oceangoing Bituminous Coal Shipments
1975 - 1985



Marketing Division
Port of New Orleans

SOURCE: U. S. Department of Commerce ('75-'83)
Miss.Valley Coal Exp. Council ('84-'85)

The Lower Mississippi River:
Mid-America's Gateway to the World

LMR Grain Exports: Principal Sources

Alabama
Arkansas
Illinois
Indiana
Iowa
Kansas
Kentucky
Minnesota
Mississippi
Missouri
Nebraska
North Dakota
Ohio
Oklahoma
South Dakota
Tennessee
Wisconsin

IMPACT OF A 45 FOOT DEEP MISSISSIPPI RIVER CHANNEL TO MILE 181 A.H.P.

COST:
-$38.8 million initially, $23.5 million annually

BENEFITS:
-$57 million annual transportation savings
-commodity cost savings range $1.32-$2.96/ton

30% of the vessels on the LMR are light-loaded due to existing project draft limits.

LMR Coal Exports: Principal Sources

Alabama
Indiana
Illinois
Kentucky
Pennsylvania
Tennessee
West Virginia

IMPACT OF A 50 FOOT DEEP MISSISSIPPI RIVER CHANNEL TO MILE 181 A.H.P.

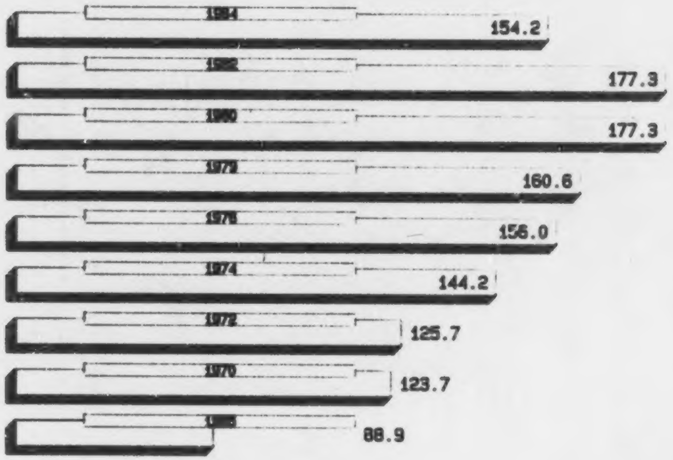
COST:
-$107.2 million initially, $40 million annually

BENEFITS:
-$84 million annual transportation savings
-commodity cost savings range $1.89-$3.11/ton

24% of all oceangoing cargo would benefit from a deeper channel.

PORT OF NEW ORLEANS TOTAL WATERBORNE COMMERCE * CALENDAR YEARS 1965 - 1984

IN SHORT TONS

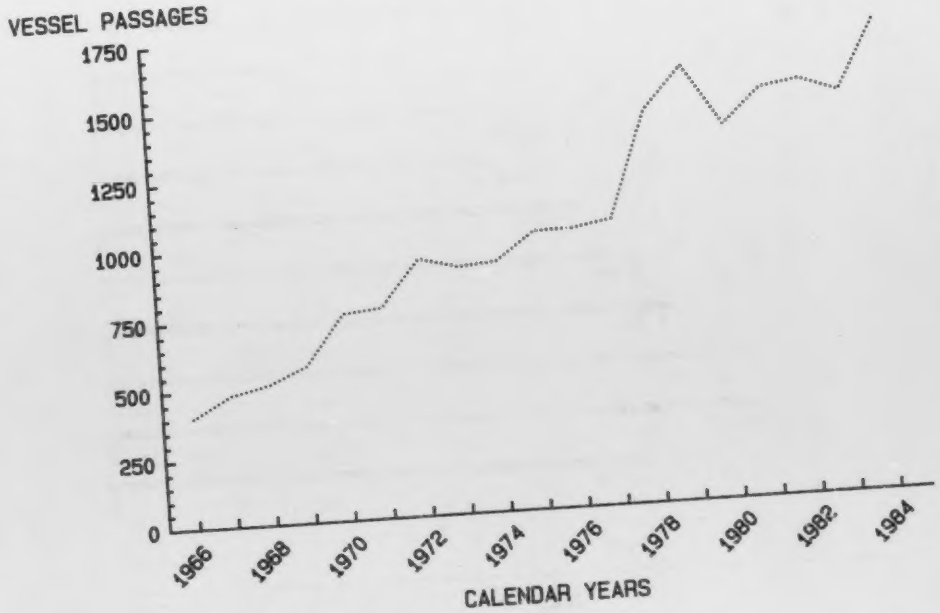


*Includes domestic & foreign movements.

SOURCE: U. S. Army Corps of Engineers

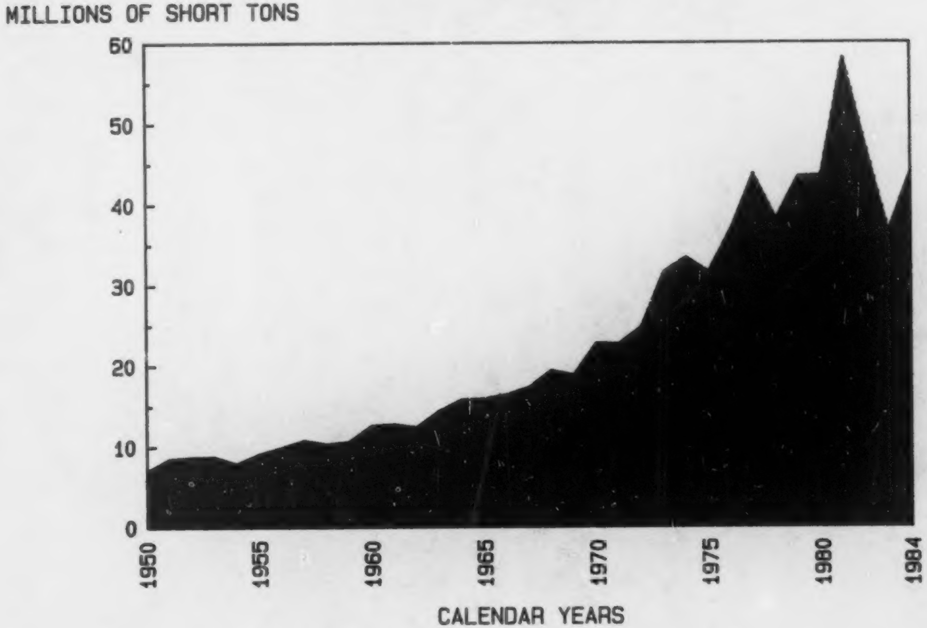
The U.S.Army Corps of Engineers defines the Port of New Orleans from mile marker 127 to the mouth of the passes.

PORT OF NEW ORLEANS VESSEL PASSAGES
MISSISSIPPI RIVER GULF OUTLET (MRGO)
CALENDAR YEARS 1966 - 1984



SOURCE: U. S. Army Corps of Engineers

PORT OF NEW ORLEANS
FOREIGN WATERBORNE COMMERCE
CALENDAR YEARS 1950 - 1984



* GENERAL AND BULK CARGO INCLUDED

SECTION TWO

BACKGROUND INFROMATION

STATISTICAL DATA

LOWER MISSISSIPPI RIVER

LENGTH:

2,350 miles from its starting point at Lake Itasca, Minnesota or 3,750 miles from the head waters of the Missouri River at Red Rock, Montana.

The Mississippi (including tributaries) is ranked as the third longest river in the world after the Nile which is 4,180 miles and the Amazon which is 3,912 miles long.

WATER SHED AREA:

1,244,000 square miles

The river drains 31 contiguous states in the United States and 2 provinces of Canada. This takes in 41% of the continuous land area of the United States.

AVERAGE DAILY FLOW:

460,000 cubic feet per second

This flow is equivalent to 297,000 million gallons per day.

AVERAGE VELOCITY:

3.1 miles per hour

SEDIMENT LOAD:

This load is equivalent to 138 million cubic yards per year. This yardage would fill the Louisiana Superdome in New Orleans 30 times or would cover a land area of 32 square miles to a height of 105 feet.

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THE PORT OF NEW ORLEANS

In 1718 the explorer Bienville founded the city of New Orleans near the mouth of the mighty Mississippi River - 14,500 miles of navigable waterways which directly link more than twenty states to the markets of the world. Since that time, the city and the port have flourished. Today, more than 265 years later, the U. S. Army Corps of Engineers reports that the Port of New Orleans handles more waterborne commerce (foreign and domestic) than any other port in the United States (1983: 156 million tons).

It is undeniable that the New Orleans area plays a vital role in the international commerce of this nation. In 1984 the lower Mississippi River (Baton Rouge to the Gulf of Mexico) handled 136 million tons of foreign waterborne commerce. Worth $28 billion, this cargo represented 16% of the nation's international waterborne trade. Bulk cargo accounted for 94% of this volume, primarily the result of tremendous grain and animal feed exports and petroleum imports. More specifically, over 2.0 billion bushels of grain or 44.4% of all U. S. grain exports entered the world market via the eleven grain elevators and midstream transfer capabilities on the lower Mississippi River. This same geographical area received 14 million tons of crude petroleum in 1984, 8% of the U. S. waterborne imports of this commodity. The Louisiana Offshore Oil Port (LOOP) also handles petroleum imports, via pipeline, to this region. Located 19 miles out in the Gulf of Mexico, LOOP is the nation's first and only deepwater port facility.

In addition to being vital to the international commerce of the nation, foreign trade through the Port of New Orleans has a direct impact on the local economy. The most recently published study reports that (1) more than 50% of the $10 billion worth of goods and services produced annually in the area are in some way dependent on oceangoing commerce; (2) over 100,000 jobs or 1/5 of the jobs in the area can be traced to port activity; and (3) 1/4 of the wages paid in the area can be linked to the port.

In 1984, the Port of New Orleans handled 43.9 million tons of foreign cargo worth $13.1 billion (included in lower Mississippi River statistics). Of this amount, general cargo tonnage totalled 7.8 million tons (major commodities: iron and steel products, rice, paper products, coffee and crude rubber). Although the volume of bulk cargo statistically dwarfs the amount of general cargo handled, the significance of the port in the movement of general cargo should not be overlooked. The Port of New Orleans consistently ranks in the top five general cargo ports in the country. Furthermore, per ton, general cargo is very valuable to the community as it produces a greater economic benefit than does bulk cargo.

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In order to handle the waterborne commerce of the area, hundreds of barge lines serve the inland waterways and 100,000 barges pass through the port annually. To carry the cargo between New Orleans and its trading partners throughout the world (more than 150 countries) approximately 4100 vessels operated by more than 100 steamship lines call at the port in a year's time (major world areas: Europe 37% of the port's foreign tonnage, Asia 29%, Africa 14%, Central America 11%, and South America 8%).

While the port's foreign market is worldwide, its domestic market is primarily mid-America, the heartland of the United States. This region currently produces 60% of the nation's agricultural products, 1/2 of all its manufactured goods, and 90% of the country's machinery and transportation equipment. According to the 1979 Tipetts-Abbett-McCarthy-Stratton Mid-America Port Study, waterborne commerce from this region is projected to reach 900 million tons by the year 2000. To accommodate this and other areas of growth, the Port of New Orleans launched a $400 million, 30-year capital improvement program in 1970 (valued in 1970 dollars). Currently, construction and renovation dollars are being spent at the rate of $100,000 each working day for facilities in two major areas of the port. The first is the Mississippi River which has 12 miles of wharves that stretch along the waterfront, and the second is the tidewater area which is served by the Mississippi River-Gulf Outlet (35% of port's tonnage over public general cargo wharves is handled by facilities on the MR-GO).

In summary, the Port of New Orleans is a dynamic, growing port. In the 265 years since Bienville founded the city of New Orleans the port has experienced dramatic changes. One thing, however, has remained constant. The Port of New Orleans has always played and will continue to play a vital role in the local economy and in the international commerce of the United States.

June 10, 1985

Mrs. **Boggs**. Thank you for your time. We not only thank you for your testimony and your recommendations but, most specifically, for this fine statistical and illustrative material. I think it will be generally helpful to us and all the committee members. It certainly will be a great help to me as far as the City of New Orleans and its environs are concerned. I thank you very much.

Mr. **Haar**. Thank you.

I might note Linda Watson, who you met a few years ago, head of our Marketing Department, prepared these and is doing a bang-up job in marketing for us.

Mrs. **Boggs**. Give her our congratulations.

Mr. **Giallanza**. I am Sam Giallanza. I am a consultant with the New Orleans Steamship Association. Mr. Hayden, the Vice-President of the Association, who was scheduled to appear here today, unfortunately had a sudden death in his immediate family and had to cancel his trip. He requested that I come up here and visit with the committee.

I have submitted for the record prepared testimony of Mr. Hayden, and I would ask it be made a part of the official record.

Mrs. **Boggs**. It will be made part of the record in its entirety.

Mr. **Giallanza**. Let me say I fully support the testimony. If I might just take a few minutes, you know anybody can make plans when you have one of these fancy computers. We would like to have brought Southwest Pass up here physically, but we found it impossible. We thought pictures would be the next best.

Mrs. **Boggs**. That is because you couldn't dredge it out.

Mr. **Giallanza**. I would like to ask Captain Michell to hold up these pictures. I think this is something you can really understand. The black and white picture was taken in 1938. And the colored portion was made in November of 1985. It is just fantastic that these pictures cover practically the same area of that part of the river 47 years later. It points out one thing, the Corps of Engineers must be good employers. They have to have had the same plain, the same photographer to get pictures to come out like that 47 years later.

The significance of the two pictures we have here today, I think it confirms the deterioration and loss of land mass which has caused a slowdown in the velocity of the flow of the water and, of course, has affected the self cleaning. At the present time, the Corps has underway its program of bank nourishment scheduled during this fiscal year and fiscal year 1987. The bank nourishment consists of construction of rock dikes which will include the self scarring of Southwest Pass.

If you will notice on the colored picture, there is a light line which is a rock dike that is already in place. There will be several in that immediate area, as well as in Southwest Pass. Once the rock dikes are in place, the Corps will put mud-fill behind the rocks. If you will notice the proximity of the bank area, and on that map there, they are right together.

So we would like to recommend to this committee that the Corps of Engineers be urged to get the mud-fill, put it behind the rock dikes there, and kill two birds with one stone.

We really feel that if this procedure is to be accomplished, that we should help the self scarring of the Southwest Pass, which is the best way to do it. I think the engineers proved that many years ago.

I must say on behalf of our membership, who are the owners and operators and agents of deep draft vessels, we would like to express the appreciation to the Corps of Engineers for its cooperation. As a matter of fact, within the past several months, a dredge information forum has been established, on which the good Captain serves here, and this is comprised of industry representatives, Corps personnel, the pilots of the Port Authority. And this forum has been quite effective. We don't have a lot of power except to collect data and see that it is disseminated to the port people that should know about it.

I certainly would like to express thanks to this committee for the support they have given to the Port of New Orleans in past years. I also would like to express my appreciation for letting me testify here today. It is good to be back, per se. And, of course, I feel right at home since the committee today is being chaired by Chairwoman Boggs, who represents the state I am from.

[The statement of Channing Hayden follows:]

Gallan

new orleans steamship association

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Summary of testimony of Channing Hayden, Vice President of the New Orleans Steamship Association, before the House Energy and Water Development Subcommittee on Appropriations, Tuesday, April 15, 1986, in reference to the projects of public interest on the Lower Mississippi River from its mouth to Baton Rouge.

1. Repairs to Jetties, Dikes and Maintenance Dredging of Southwest Pass and Maintenance Dredging of the Mississippi River from Baton Rouge to the Gulf and Construction of New Anchorage Area.

   The Lower Mississippi River, from the Gulf to Baton Rouge, ranks as a leading World Port. If the cargo-carrying capacities of vessels are again restricted by reduced entrance channel depths, this area will rapidly lose its world port status. This will have a detrimental effect on the National economy. The President's budget appropriation for FY 87 is $33.225 million. We urge that $39.655 million for Operation and Maintenance, General, Mississippi River, Baton Rouge to the Gulf, be appropriated. The $6.43 million over the President's Budget would be used for necessary channel dredging. We urge the approval of the $19.4 million in the President's Budget for construction and an additional $9 million to give the Corps its full capabilities to complete necessary bank nourishment projects.

2. Channel Deepening for Lower Mississippi River.

   A 55- foot channel is the competitive edge we need to compete in international trade because of the substantial cost reductions which will result for bulk cargoes carried on the lower Mississippi River. These cost reductions will allow American products to be more competitive in world markets. We recommend that the Corps' full capabilities of $9 million as included in the President's budget be appropriated to allow the completion of the 45-foot channel as a first step toward the construction of the 55-foot channel.

3. The Mississippi River-Gulf Outlet Maintenance Dredging.

   The number of vessels using the Mississippi River-Gulf Outlet has increased over the years. Located on this waterway are the Port of New Orleans' Bulk Handling Plant, most of the Port's container facilities, the ro-ro terminal and additional facilities under construction which provide newer cargo handling methods to accommodate the larger ships now serving international trade. It is recommended that the Corps' full capability of $6.14 million as included in the President's budget be appropriated for Mississippi River-Gulf Outlet, Operation and Maintenance, General.

4. The Mississippi River-Gulf Outlet, Construction, General.

   The planning and design for the urgently needed New Ship Lock continues. This lock, once in operation, will relieve existing hazardous congestion and costly delays to foreign commerce. It will promote the economic growth and development of water-oriented industries along the Mississippi River and the Mississippi River-Gulf Outlet, thus promoting the future growth of the Port area of New Orleans. It is urged that the Congress provide the $2 million as requested in the President's Budget for FY 87 to satisfy the Corps of Engineers' capability for the continuance of the lock design and related matters.

Testimony of Channing Hayden, Vice President of the New Orleans Steamship Association, before the House Energy and Water Development Subcommittee on Appropriations, Tuesday, April 15, 1986, in reference to the projects of public interest on the Lower Mississippi River from its mouth to Baton Rouge.

Mr. Chairman:

My name is Channing Hayden. I am Vice President of the New Orleans Steamship Association. Our membership of some 56 steamship owners, operators, agents and stevedores on the Lower Mississippi River is associated with hundreds of ship owners in international commerce.

My testimony concerns projects essential to the future of the Lower Mississippi River from Baton Rouge to the Gulf. These projects, listed below, impact the nation in jobs and our ability to compete in world markets. They should be funded as noted in our summary.

1. Repairs to jetties, dikes and maintenance dredging of Southwest Pass. Maintenance dredging of the Mississippi River from Baton Rouge to the Gulf. Enlargement and deepening of the Pilottown Anchorage.

2. Development of the Fifty-Five Foot Channel and completion of the Forty-Five Foot Channel for Lower Mississippi River.

3. Maintenance dredging of the Mississippi River-Gulf Outlet.

4. Continuation of the Design Program of the Mississippi River-Gulf Outlet New Ship Lock.

Repairs to the jetties and dikes and maintenance dredging of Southwest Pass is vital in keeping project draft. Project draft, in turn, ensures that the Mississippi River's deep water ports will continue to handle the country's foreign waterborne commerce in the most cost effective way possible.

In 1984 (most recent statistics available) the Lower Mississippi River handled 136 million tons of our country's foreign waterborne commerce. This represents a 41.6% increase over the last ten years. But, in the past, shoaling in Southwest Pass (see table below) has caused cargo diversion, adding millions of dollars in operating cost. The added cost has caused the loss of jobs in our area and made American products less competitive on the world market.

The table below shows the history of draft restrictions in Southwest Pass--the only deep draft entrance and exit to the Mississippi River.

History of Days During Which Vessels Were Restricted to Less Than Project Depth at Southwest Pass

YEAR	VESSELS UNDER 100,000 DWT	VESSELS 100,000 DWT & OVER
1970	205 Days - 56.2%	205 Days - 56.2%
1971	139 Days - 38.1%	139 Days - 38.1%
1972	0 Days - 0.0%	0 Days - 0.0%
1973	278 Days - 76.2%	278 Days - 76.2%
1974	219 Days - 60.0%	259 Days - 70.9%
1975	157 Days - 43.0%	182 Days - 49.9%
1976	0 Days - 0.0%	120 Days - 32.9%
1977	0 Days - 0.0%	0 Days - 0.0%

1978	0 Days - 0.0%	97 Days - 26.6%
1979	94 Days - 25.8%	182 Days - 49.9%
1980	59 Days - 16.2%	254 Days - 69.6%
1981	0 Days - 0.0%	327 Days - 89.6%
1982	0 Days - 0.0%	152 Days - 41.6%
1983	71 Days - 19.5%	312 Days - 85.5%
1984	92 Days - 25.2%	131 Days - 35.9%
1985	51 Days - 14.0%	221 Days - 60.5%

The history from 1970 to 1985 shows that vessels over 100,000 deadweight tons (DWT) have had less than project draft 48.9% of the time. In the last five years (1981 to 1985) over 22,000 large vessels have called on the Lower Mississippi and have been restricted 62.5% of the time. In two of these years large vessels were restricted over 85% of the time. This year, 1986 (from January 1 to date), large vessels have already been restricted 37.1% of the 105 days--more than one-third of the time.

We studied four vessels of many that were affected in the current high-water period (1985-86). As a result of a loss of only 1 to 1-1/2 feet for each of the vessels, some 12,673 tons of cargo valued at $1.2 million were left behind. This was bulk cargo which, because of the complex international chartering arrangements, was not carried on other ships. The result is lost trade, lost jobs, and lost future business for the Lower Mississippi River. Based on the above, if just 10% of the some 6,000 vessels calling annually on the Lower Mississippi River were affected by a 1 to 1-1/2 foot draft reduction, we estimate that the total loss would be more than 1.9 million tons with an estimated value of over $186 million. There is another side to these losses. When vessels go aground because of shoaling, additional expenses are incurred. One vessel we studied was aground for 4 days and spent $126,000 above its normal operating expenses during that time. When vessel owners must assume this type of risk to call on the Lower Mississippi River, our port area becomes less attractive.

We cannot emphasize too strongly that draft restrictions will have a detrimental effect on the future of the Lower Mississippi River Port Facilities and the important Mississippi Valley they serve. The inability to constantly maintain project depth deters charterers and owner from contracting to load full cargoes of bulk commodities at local port facilities because of the uncertainty of the controlling draft. The uncertainty of channel depths could cause the entire area from the Gulf to Baton Rouge to become a penalty port area.

We make a special appeal for appropriations in FY 87 to avoid in the future the serious shoaling problems that have affected Southwest Pass in the past. The Port of New Orleans has shown that each 500 tons of cargo creates one job. Thus, our request is for adequate funding to preserve and protect the 272,000 jobs created by the foreign waterborne commerce on the Lower Mississippi River.

If the Lower Mississippi River is to continue as a major port, we must be able to serve the larger, more efficient vessels. To do so, the entrance to our port, Southwest Pass, must not only be maintained at all times at its authorized project depth, it must be deepened.

The need for channel deepening is underscored by the growth of two export cargoes on the Lower Mississippi River--grain and coal. Up to 1960, one grain elevator operated on the Lower Mississippi River. Today, there are ten elevators and numerous midstream loading operations. During the 1960s, between 14 and 19 million tons of grain was handled yearly. In the 1970s tonnage substantially increased to between 30 and 40 million tons yearly--over one-third of the nation's total grain exports. Last year (1985), 51.6 million tons of grain were handled--an increase of 5.7% over 1984. In 1984 the Lower Mississippi River moved 44.4% of our country's total grain exports. In 1985 it was 50.1%. In addition to grain, millions of tons of petroleum and petroleum products, along with various ores, are carried by large vessels to and from the Lower Mississippi River. Coal exports increased from 1.25 million tons in 1975 to over 8.3 million tons last year--an increase of 564%.

However, the real potential of growth may only be reached with a 55-foot channel. It is estimated that $4 per ton or more can be saved exporting grain if the channel could accommodate vessels loaded to 55 feet. A savings of $400,000 or more could be realized on just one ship loading 100,000 tons of grain. Brazil, Argentina, Australia, and Canada are becoming more aggressively competitive in the world grain market. It would not be surprising in the future to find America's competitive edge in world grain trade determined solely by the lower transportation costs noted above.

Combined with the expected growth in grain exports is the potential for continual growth in coal exports. Here, too, is a potential savings in transportation costs to America's customers--$6 per ton or more if the channel would allow vessels to load to 55 feet.

The increase in grain and coal exports will have several positive effects on the U. S. economy. Grain, traditionally, has had a positive effect on our balance of payments. The same can be expected of coal exports. But the greatest effect that deepening the channel will have is the creation of new jobs. Commerce through the Lower Mississippi River already provides some 272,000 jobs. The deepening project will protect these jobs and generate new ones. New jobs are vital for our state because of the depression in oil. Because of its tremendous positive impact, the Corps' 8.1-to-1 benefit-cost ratio of this $525 million project may be conservative, especially since growth in coal exports were not included.

In order that the strength and growth of the Mississippi Valley will continue, we urge that Congress appropriate the Corps' full capability of $9 million for a 45-foot channel. These funds can provide almost immediate help to shipping on the Mississippi River. It will not only help the larger 100,000 ton vessels but provide some draft stability for all bulk traffic. It will also benefit all shipping in general, as the deeper channel will eliminate some delays and congestion many vessels now experience when shoaling results in the grounding of a single vessel. Additionally, this project must be accomplished without the imposition of user fees. Such fees could wipe out the economic benefits of deepening the channel.

Since 1974 navigational interests have been urging a very important project in our area--the enlarging and deepening of Pilottown Anchorage. This anchorage is strategically located at the entrance to the Lower Mississippi River Port Complex. Some years ago Congress approved the project and the Corps' study was completed. However, the anchorage has not yet been widened or deepened. During the periods of intense fog we experience, large and/or deeply laden vessels need this anchorage as a safe haven.

Without it, these vessels must transit to the Boothville Anchorage--many times with zero visibility. This project is vital to navigational safety and we urge you to provide the needed funds. Further, there is another benefit from the deepening of the Pilottown Anchorage. There is evidence that silt material from the anchorage results in shoaling within the channel in the vicinity of the Head of Passes, causing difficulties for navigation. Thus, removal of this siltation would assist in maintaining stability in channel depth for that area.

The President's budget for Operations & Maintenance, General, Mississippi River, Baton Rouge to the Gulf is $33.225 million. We recommend an appropriation of $39.655 million. The additional funds will give full capability to the Corps for necessary dredging and also provide for maintenance of the 45 foot channel.

We urge approval of the President's budget of $19.4 million along with the additional $9 million to give the Corps full capability for dike construction and bank nourishment.

The growth of the Port of New Orleans depends, in large measure on the Bulk Handling Plant and the Port's container and ro-ro facilities, among others, located on the Mississippi River-Gulf Outlet. In 1985, there were 1,665 deep draft transits in this channel--up 61% over the past eleven years. This seaway has a project depth of 36 feet. Shoaling has resulted in the loss of project draft. Within the past five years, the controlling depth on this channel has been less than project for 615 days--or 33.6% of the time. For safety reasons, transit restrictions apply to vessels with a draft of 30 feet or more. To improve safety on this channel and reduce or eliminate transit restrictions, funds should be appropriated to dredge and maintain a holding area and provide updated and additional navigational aids. In addition, we request that the Congress appropriate $6.14 million which is in the President's FY 87 budget for Operations & Maintenance, General, Mississippi River-Gulf Outlet.

The Public Bulk Terminal and the container terminals are located on the Mississippi River-Gulf Outlet, while the grain and other bulk facilities, and the public wharves are located on the Mississippi River. An adequate route between the Mississippi River-Gulf Outlet and the river is essential. The shortest route is an inefficient, antiquated 50-year-old lock with a width of 75 feet and limited to a depth of 30 feet. Its maximum capacity has long been exceeded. The waiting time for passage through the lock at present averages from 8 to 10 hours; however, waiting time on occasion has been in excess of 24 hours.

An adequate ship lock, 150 feet by 1,200 feet by 50 feet, has been authorized; and we urge that Congress provide the President's requested $2 million, which will support the Corps of Engineers' capability for continuing the study and design of this project.

I appreciate the opportunity to appear before the Committee.

Mrs. **Boggs**. Thank you so much. We are thankful for your input. We are very pleased to have this additional information from you.

Mr. **Haar**. I would like to call Captain Michell now. He will make a pretty short presentation.

Captain **Michell**. Madam Chairman, my testimony has been submitted for the record, and I ask it be accepted.

Mrs. **Boggs**. It will be accepted.

Captain **Michell**. In the interest of time, I will just read from an abbreviated version of that testimony.

Madam Chairman, I am Jacques Michell, President of the Associated Branch Pilots, the Bar Pilots for the deepwater ports of the Mississippi River from Baton Rouge, Louisiana to the Gulf of Mexico.

I am here to testify, with the Board of Commissioners of the Port of New Orleans, on projects that are of vital interest to safe navigation and maritime commerce on the Lower Mississippi River.

The channel in the Lower Mississippi River is presently maintained at the Federally authorized depth of 40 feet which places a physical restriction on the ability of many vessels calling at ports in the river to operate at maximum efficiency. The 40-foot limit is far below the capability of vessels that were built more than 20 years ago.

The versatility of the river system in the Mississippi Valley is well defined. Its integration with other forms of transportation is well established. Waterborne commerce is the Valley's greatest contribution to the economic and efficient movement of cargos in and out of the heartland of the United States due to its low cost per ton/mile and proven record of safety.

However, development of access to these facilities has failed to keep pace. Approximately one out of four of the vessels calling in the Mississippi River have the capability of loading to drafts greater than the present 40-foot project. Vessels greater than 120,000 deadweight tons, whose drafts, when fully loaded, would exceed 55 feet, call regularly in the Mississippi River. Vessels of more than 240,000 deadweight tons have also entered the river at drafts far less than their capabilities. The project is not a proposal of a new waterway, only the improvement of a proven waterway system. All conditions, except increased channel depth, are available and ready in the Mississippi River.

Over the years the Corps of Engineers has studied, developed and improved the channels leading to the several ports along the Mississippi River by constructing training works, pile dikes, bulkheads and bank nourishment projects. As the engineers continue to develop and improve those channels, the design makes them self-maintaining. Therefore, funding in this area is essential to the reduction of maintenance costs.

Recently the Corps has invited the Associated Branch Pilots into the discussions of the shoaling that occurs in Southwest Pass during high river stages. We were pleased that the advice of the pilots caused the timely and efficient direction of dredging efforts and resulted in an increase in the efficient use of the funds allocated to this project, along with a decrease in the losses that shippers have suffered in the past due to draft reductions as there were no significant reductions of operating draft during the last shoaling cycle. We are told that the stability that has resulted by our participation in the dredging issue has stimulated an increase in export activity in the river's coal industry, and export, I am told, is vital to the nation's economy. Full Corps capability in this area should continue to be funded in order to insure the Corps ability to continue to respond effectively.

Funding of the Corps initiatives in the Lower Mississippi River is money well spent and money that will ultimately return. I urge your support of these very important projects.

I would like to thank you for the opportunity to be here.

[The statement of Jacques B. Michell follows:]

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April 15, 1986

Testimony of

Jacques B. Michell, President
Associated Branch Pilots for the Port of New Orleans, Louisiana

Before the House Energy and Water Developement Subcommittee on Appropriations

Mr. Chairman:

I am Jacques Michell, President of the Associated Branch Pilots, the Bar Pilots for the deepwater ports of the Mississippi River from Baton Rouge, Louisiana to the Gulf of Mexico.

The Associated Branch Pilots is one of three pilot associations applying specialized piloting techniques in order to meet the demands of safe and efficient navigation in two of the four geographically different channels leading to the deepwater ports on the Mississippi River. The Bar Pilots, as we are called pilot vessels through the narrow and shallow entrance to the Mississippi River system known as Southwest Pass. We are also pilots for the Mississippi River-Gulf Outlet, which is a manmade channel, seventy-five miles long, that begins in the Gulf of Mexico and intersects the intercoastal waterway system at New Orleans.

I am here to testify, with the Board of Commissioners of the Port of New Orleans, on projects that are of vital interest to safe navigation and maritime commerce on the lower Mississippi River.

A United States Army Corps of Engineers study has reported favorably on a deep draft access to the lower Mississippi River via the Southwest Pass. The deep draft access would enable vessels with drafts of as much as 45 feet to enter the river and call at ports as far upriver as Baton Rouge. The channel in the lower Mississippi River is presently maintained at the federally authorized depth of forty feet which places a physical restriction on the ability of many vessels calling at ports in the river to operate at maximum efficiency. The forty foot limit is far below the capability of vessels that were built more than twenty years ago.

Containerization, which has firmly established itself as the most economical and efficient method of transportation of general cargo for the present and future, continues to develope. Container ships have already been constructed that are capable of exceeding present channel depths. Expansion of container facilities to meet the increasing numbers of these specialized vessels that call at the Port of New Orleans continues. Production of newly developed vessels for this service is already well underway.

The versatility of the river system in the Mississippi valley is well defined. Its integration with the other forms of transportation is well established. Waterborne commerce is the valley's greatest contribution to the economic and efficient movement of cargos in and out of the heartland of the United States due to its low cost per ton/mile and proven record of safety.

However, development of access to these facilities has failed to keep pace. Aproximately one out of four of the vessels calling in the Mississippi River have the capability of loading to drafts greater than the present forty foot project. Vessels greater than 120,000 deadweight tons, whose drafts, when fully loaded, would exceed fifty-five feet call regularly in the Mississippi River. Vessels of more than 240,000 deadweight tons have also entered the river at drafts far less than their capabilities. The project is not a proposal of a new waterway, only the improvement of a proven waterway system. All conditions, except increased channel depth, are available and ready in the Mississippi River.

The Mississippi River's companion channel, the Mississipppi River-Gulf Outlet, continues to increase in usage. The increase in the voulme of traffic results in a reduction in the need for maintenance dredging as the passage of vessels using the channel assists in the maintenance of channel depths. Some maintenance dredging, particularly of the area not bounded by land, will be needed and funding of this project should continue.

Over the years the Corps of Engineers has studied, developed, and improved the channels leading to the several ports along the Mississippi River by constructing training works, pile dikes, bulkheads and bank nourishment projects. As the engineers continue to develope and improve those channels the design makes them self-maintaining. Therefore, funding in this area is essential to the reduction of maintenance costs.

Despite the Corps' efforts, conditions periodically occur that require individualized attention. Unpredictable and above average snowfall and rainfall in the Mississippi valley results in an increase in the amount of water flowing down to the Gulf carrying with it silt that results in shoaling of the channel in Southwest Pass. By proper management and prioritization, the Corps has been able to effect timely restoration of the authorized channel dimensions.

Recently the Corps has invited the Associated Branch Pilots into the discussions of the shoaling that occurs in Southwest Pass during high river stages. We were pleased that the advice of the pilots caused the timely and efficient direction of dredging efforts and resulted in an increase in the efficient use of the funds allocated to this project along with a decrease in the losses that shippers have suffered in the past due to draft reductions as there were no significant reductions of operating draft during this last shoaling cycle. We are told that the stability that has resulted by our participation in the dredging issue has stimulated an increase in export activity in the river's coal industry and export, I am told is vital to the nation's economy. Full Corps capability in this area should continue to be funded in order to insure the Corps ability to continue to respond effectively.

Funding of the Corps initiatives in the lower Mississippi River is money well spent and money that will ultimately return. I urge your support of these very important porjects.

Mr. Chairman, this concludes my testimony. Thank you.

Mrs. **Boggs.** We are very grateful to you, Captain Michell, especially for your participation in the Corps and also that you have been advising the Corps of Engineers and have had your advice very well received. A reciprocal arrangement made with them is vital, I think, to completion of our projects and, of course, to the trade and commerce of the area and the balance of trade for the United States. You are doing a splendid job, and we are grateful to you.

I am glad to see you brought those two pictures. The Holmes bag has been here since before the first picture was taken.

Mr. **Giallanza.** We are going to leave those pictures at your office.

Mrs. **Boggs.** They are compelling photographs. We are so grateful to you. If you would like to add anything, we are happy to hear it.

Mr. **Haar.** I think this concludes our testimony, and we want to thank you for your usual outstanding reception and hospitality, and also we want to make a special note of your personal staff, Jan Schoonmaker, who has worked very closely with us and has been very helpful over the years, and also the committee staff, who have certainly been good friends and most helpful over the years. We are most appreciative of all their cooperation.

Mrs. **Boggs.** We certainly are. We thank all of them very much. I thank all of you. If you have concluded your testimony, the committee will stand adjourned until 2 this afternoon.

Tuesday, April 15, 1986.

CENTRAL ARIZONA PROJECT

WITNESSES

HON. MORRIS K. UDALL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

HON. JIM KOLBE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

HON. JOHN McCAIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

GOV. BRUCE BABBITT, STATE OF ARIZONA

HON. TERRY GODDARD, MAYOR OF PHOENIX

JOHN E. SMITH, PRESIDENT OF THE BOARD OF DIRECTORS, MARICOPA-STANFIELD IRRIGATION AND DRAINAGE DISTRICT

NORMAN PRETZER, PRESIDENT OF THE BOARD OF DIRECTORS, CENTRAL ARIZONA IRRIGATION AND DRAINAGE DISTRICT

ROBERT F. BARCELLO, PRESIDENT OF THE BOARD OF DIRECTORS, NEW MAGMA IRRIGATION AND DRAINAGE DISTRICT

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Mr. **Bevill.** The meeting will come to order.

We are delighted to have our good friend and colleague, Congressman Udall, with us. You may sit right here at the table, Mo, and proceed as you wish.

Mr. **Udall.** Our main presentation will be made by the Governor.

Mr. Bevill. We are always pleased to have you with us, Governor. We look forward to hearing from you.

Mr. Udall. Just a few hours ago, Secretary Hodel signed a cost-sharing agreement intended to accelerate construction of major features of the CAP we know as Plan 6. This agreement took a year-and-a-half of hearings, negotiations, compromise and hard bargaining. It is the first such agreement to my knowledge involving a major water project that was already under construction.

The Arizona parties to the agreement have pledged to provide more than $370 million up front local financing over an eight-year period. In return the Administration agreed to seek sufficient funding which, when combined with local contributions, will enable us to meet our construction schedule.

To its great credit the Administration has requested $204 million for fiscal year 1987. Mr. Chairman, I join with the rest of the Arizona delegation, the Governor, and all the parties to the Plan 6 agreement in expressing support for the Administration request and respectfully urge your subcommittee to appropriate the full amount.

Last year the first Colorado River water was delivered to Phoenix. The CAP canal is 75 percent complete. The sooner the project is completed, the sooner Arizona as well as the Federal government will begin to realize its full benefits and we can start paying back our share of the cost.

Thank you.

Mr. Bevill. I want to thank you for a very fine statement, Mo, and at this time I want to recognize my good friend and colleague, Congressman Eldon Rudd who serves with such distinction on this subcommittee

Mr. Rudd. Thank you, Mr. Chairman. I want to give sincere thanks to our colleague and friend, Mo Udall, who chairs the Interior Committee and who has displayed great leadership through the years to help not only the course of action that takes place on this committee, but in providing much needed services in such very important things as water for our country, as well as for our state.

And I welcome our Governor here who has developed the courses of action that have assured water for the State and for the health of the Nation. And I welcome our other friends and colleagues.

I see Jim Kolbe here, let me say that Bob Stump is in a committee meeting and could not attend, but indicated that he would submit a statement and I am sure that Congressman McCain will also do that, but I have a list of all of the Arizonans present and there are nearly 40 of them, and I would like to submit that for the record, Mr. Chairman.

Mr. Bevill. Without objection, that will be made a part of the record, and it would be nice for them to stand so we can see those that are present, who left their businesses and incurred expense to be here.

[The list of participants follows:]

Central Arizona Project Support Group

STATE OF ARIZONA

Governor Bruce Babbitt.
Marilyn Seyman, Special Assistant to Governor Babbitt.
Larry Linser, Department of Water Resources.

ARIZONA CITIES

Hon. Terry Goddard, Mayor of Phoenix.
George Britton, Associate City Manager, Phoenix.
John O'Donnell, Phoenix Washington Representative.
Bill Chase, Water Resources consultant, city of Phoenix.
Marvin Cohen, representing the Mayor of Tucson.
Roger Manning, representing Maricopa County cities.

CENTRAL ARIZONA WATER CONSERVATION DISTRICT

George Barr, Chairman of the Board.
Jay Rhodes, Vice Chairman of the Board.
Lyn Sharp, member of the Board.
Tom Clark, General Manager.
Mary Anne Niccoli, Deputy Manager.
Hon. John J. Rhodes, Washington Representative.

CENTRAL ARIZONA PROJECT ASSOCIATION

H.S. Raymond, Chairman of the Board.
Webb Todd, President.
William H. Wheeler, Executive Director.
Morley E. Fox, Washington Representative.

SOUTHERN ARIZONA WATER RESOURCES ASSOCIATION

Dale Pontius, President.
Luther Davis, Vice President.
Katie Dusenberry, Secretary.
Jim Dezart, Treasurer.
Bill Estes.
Dick Walden.
Marybeth Carlile, Executive Director.
Terry Bracy, Washington Representative.
Susan Williams, Washington Representative.

OTHERS

George Campbell, member, Maricopa County Board of Supervisors.
Michael Rappoport, Salt River Project.
Peter Hayes, Salt River Project.
Fred Alderson, Arizona Public Service.
Joe Falbo, Maricopa County Municipal Water Conservation District.
Jim Hennis, Chairman, Arizona Power Authority.
Maurice Langley, Bookman-Edmondson Engineering.

Mr. RUDD. Would all the Arizonans stand who have worked so hard on this project. I even see a law school classmate back there, Luther Davis. We have representatives from the Southern Arizona Water Resources Association, from all the important entities in the Valley of the Sun, Salt River Power, and Arizona Public Service. We also have the Central Arizona Water Conservation District, and the Central Arizona Project Association. Cities and towns involved all along the route of the CAP are here today, including the Mayor of Capital City, Mr. Terry Goddard, and of course the principal state officer and the Governor, Bruce Babbitt, and I thank you for recognizing me, Mr. Chairman, so that I could pay my respects to all of the wonderful Arizonans that are here, smiling all of them after what happened this morning.

Mr. **Bevill**. Congressman Kolbe, we are glad you could be with us here. Before you start, I notice our former colleague, Congressman John Rhodes is here. John, you can come up here and join us.

I want to commend all of you for what your delegation has done here, all working together. That is always very impressive. We commend you all.

I have been out there to see the Central Arizona Project a few times and I was impressed with everything that has been done. John Rhodes played a role, too. Mo, I still want to find out from you how you got that good agreement you have there. I would just say I commend you for it.

We will move on now and hear from our good friend and colleague, Jim Kolbe.

Mr. **Kolbe**. Thank you, Mr. Chairman, I will make my remarks brief and if I may, I will insert my statement for the record.

Congressman Rudd told you, I know, earlier this morning we had a very important ceremony down at the Department of Interior, the signing of this agreement between the State of Arizona and the Department's Bureau of Reclamation which will assure the prompt completion of the Central Arizona Project and construction of Plan 6 elements of that.

That will be done through the State of Arizona sharing in the funding of this project by putting a good deal of the cost of this, almost one-third of it, in terms of up-front funding to make sure the project proceeds on a timely basis.

The advantages to everybody in that are obvious. The State of Arizona benefits from getting it built in timely fashion, the taxpayers of the United States benefit in being able to postpone their costs until further down the road on that.

So I think it is a—certainly to some extent a precedent-setting agreement and one that I think all of us can, who have the interests of the American taxpayers as well as the kind of project which I think is in the national interests at heart, can be very proud of.

As the one Member here who represents solely the southern part of the State, Mr. Chairman, I think you are aware that last fall we had our dedication and the water flows now to Phoenix. But those of us in the southern part of the state won't rest easy until this project is completed, and we see the water coming not only to Phoenix but into Pinal County and to Tucson and Pima County.

We understand the importance of completing this. Tucson, Arizona, is the largest city in the United States, in fact I am told in the world, that relies entirely on ground water for its source of water supplies. We understand the importance of conservation and we are engaged in a very strenuous conservation effort, but as a growing part of this country, we also know we have a need to supplement our water supplies.

We are very appreciative of the attention and the consideration that we and this Arizona delegation and all those people that are here today have received from your subcommittee in the past. I am very pleased, though this is only my second time to appear before you on this subject, but I very much appreciate the courtesies you have extended to us.

I look forward to coming back with you in future years. Thank you, Mr. Chairman.

[The statement of Mr. Kolbe follows:]

TESTIMONY OF CONGRESSMAN JIM KOLBE
BEFORE ENERGY & WATER DEVELOPMENT SUBCOMMITTEE
OF THE HOUSE APPROPRIATIONS COMMITTEE

APRIL 15, 1986

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE,

I AM PLEASED ONCE AGAIN TO APPEAR BEFORE YOU WITH MY COLLEAGUES IN THE ARIZONA DELEGATION, AND WITH THE MULTITUDE OF ARIZONA OFFICIALS AND FRIENDS WHO HAVE CONTRIBUTED THEIR BEST EFFORTS TO THE MONUMENTAL TASK OF THE CENTRAL ARIZONA PROJECT.

A GREAT DEAL HAS TAKEN PLACE SINCE THE LAST GATHERING OF THIS GROUP BEFORE THIS PANEL. IN NOVEMBER, PHOENIX RECEIVED ITS FIRST DELIVERY OF C.A.P. WATER IN A CEREMONY ATTENDED BY THE SECRETARY OF THE INTERIOR. AT THAT TIME, I TOLD THE GATHERED ASSEMBLAGE OF DISTINGUISHED ARIZONANS THAT WHILE DELIVERY OF WATER TO PHOENIX WAS CERTAINLY A MOMENT WORTHY OF NOTE, NO REAL CELEBRATION COULD TAKE PLACE UNTIL THAT WATER HAD FOUND ITS WAY TO TUCSON. WE HAVE ALSO SEEN, AS OF THIS MORNING, THE COMPLETION OF A BOLD COOPERATIVE FINANCING AGREEMENT BETWEEN ARIZONA AND THE UNITED STATES. THIS AGREEMENT EMBODIES THE IDEAL OF FEDERAL AND STATE ENTITIES AS PARTNERS IN CONFERRING BENEFITS UPON OUR RESPECTIVE CONSTITUENCIES. UNDER THE TERMS OF THIS PLAN, LOCAL ENTITIES ARE FORWARD FUNDING NEARLY $350 MILLION OF CONSTRUCTION TO COMPLETE THE ESSENTIAL "PLAN 6" PHASE OF THE CAP. AS A RESULT, ARIZONANS CAN LOOK FORWARD TO A CONSISTENT CONSTRUCTION SCHEDULE FOR THE CAP, AND THE FEDERAL GOVERNMENT CAN BE ASSURED THAT ITS CONTRIBUTIONS WILL BE KEEPING THE C.A.P. ON TRACK AT THIS CRUCIAL STAGE.

ALL IN ALL, IT HAS BEEN A GOOD YEAR FOR THE CENTRAL ARIZONA PROJECT -- AND THE PRESIDENT'S REQUEST TO CONGRESS FOR AN APPROPRIATION OF $212 MILLION

FOR CONSTRUCTION OF THIS VITAL PATHWAY TO ARIZONA'S FUTURE ACKNOWLEDGES THE NEED TO KEEP THIS PROJECT ON SCHEDULE.

WITH THIS APPROPRIATION, CONSTRUCTION CAN CONTINUE ON SCHEDULE WITH WATER REACHING TUCSON BY 1991. I BELIEVE THE C.A.P. IS DESERVING OF THIS APPROPRIATION FOR AT LEAST THREE reasons. FIRST, THE PLAN 6 FINANCING AGREEMENT IS AN UNPRECEDENTED EFFORT BY LOCAL OFFICIALS TO SHARE THE SHORT TERM LOAD OF CONSTRUCTION FUNDING. SECOND, THE PERFORMANCE ON CONTRACTS HAS SIGNIFICANTLY IMPROVED IN THE LAST YEAR -- AND THE PRESIDENT'S BUDGET RECOMMENDATION IS CERTAIN TO BE SPENT FULLY AND EFFECTIVELY. THIRD, AND FINALLY, C.A.P. REPRESENTS A LIFELINE FOR CONTINUED PROSPERITY IN ARIZONA. ALL THE GROUNDWATER MANAGEMENT AND CONSERVATION EFFORTS THAT ARE BEING AGGRESSIVELY PURSUED IN ARIZONA WILL BE OF NO AVAIL IN THE FACE OF EXPLOSIVE POPULATION GROWTH SO EVIDENT IN OUR STATE, IF WE CANNOT SUPPLEMENT OUR WATER SUPPLY.

AGAIN, MR. CHAIRMAN, I WANT TO THANK YOU FOR GIVING ME THE OPPORTUNITY TO APPEAR TODAY TO SPEAK ON BEHALF OF THE CENTRAL ARIZONA PROJECT, AND TO OFFER MY FULL SUPPORT FOR PRESIDENT REAGAN'S BUDGET REQUEST OF $212 MILLION FOR THE C.A.P.

Mr. Bevill. I noticed our friend and colleague, John McCain, another gentleman from Arizona, is here.

Mr. McCain. Thank you, Mr. Chairman, I would like to submit a statement for the record if I may, and I would not like to elaborate on the previous comments except to say I have a certain sense of regret at this time in knowing that this is the last time that I will be testifying before Congressman Eldon Rudd who has done such a magnificent job on behalf of the Central Arizona Project. The people of Arizona will miss him and I don't believe that we would be where we are today without his dedication and his service.

Also, Mr. Chairman, I remember very well when you came to Arizona to personally view our project which I think is indicative of the commitment and dedication you have displayed over the years for our project, and I again appreciate all you have done and on behalf of many Arizonans we thank you, Mr. Chairman.

[The statement of Mr. McCain follows:]

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STATEMENT OF THE HONORABLE JOHN McCAIN BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT OF THE HOUSE APPROPRIATIONS COMMITTEE
TUESDAY, APRIL 15, 1986

MR. CHAIRMAN, TODAY MARKS MY FOURTH APPEARANCE BEFORE THIS SUBCOMMITTEE TO EXPRESS FULL SUPPORT FOR THE PRESIDENT'S BUDGET REQUESTS FOR THE CENTRAL ARIZONA PROJECT.

MR. CHAIRMAN, DURING THESE FOUR SHORT YEARS, THROUGH THE HARD WORK AND COMMITMENT OF YOUR SUBCOMITTEE AND THIS ADMINISTRATION, THE CENTRAL ARIZONA PROJECT HAS GONE FROM A PROJECT RIDDLED WITH SLIPPAGE AND DELAYS TO ONE WHICH HAS NOT ONLY MADE-UP FOR THOSE SLIPPAGES AND DELAYS, BUT ALSO HAS FULFILLED THE INTERIOR DEPARTMENT'S PROMISE TO DELIVER WATER FROM THE COLORADO RIVER TO PHOENIX BY 1985. THIS PLEDGE WHICH WAS MADE IN 1979 WAS REALIZED IN NOVEMBER OF 1985.

THE PRESIDENT'S BUDGET FOR FY 1987 REQUESTS $203 MILLION FOR THE CENTRAL ARIOZNA PROJECT. THIS FIGURE CLEARLY ILLUSTRATES THE ADMINISTRATION'S COMMITMENT TO ENSURE THE TIMELY COMPLETION OF THE AQUEDUCT TO TUCSON BY 1991, AS WELL AS ITS ADHERENCE TO THE PRESIDENTIAL POLICY FOR WATER PROJECT FINANCING AND COST-SHARING OBJECTIVES.

THE HISTORIC AGREEMENT REACHED BETWEEN THE UNITED STATES AND THE ELEVEN ARIZONA PROJECT BENEFICIARIES TO BRING $371 MILLION IN LOCAL COST SHARING TO HELP ASSURE THE SPEEDY CONSTRUCTION OF CAP DAM PROJECTS TO PROVIDE WATER STORAGE AND FLOOD CONTROL IN THE PHOENIX AREA IS AN AFFIRMATION OF THE ONGOING INVOLVEMENT AND COOPERATION AMONG LOCAL STATE AND FEDERAL INTERESTS. THIS UNIQUE RELATIONSHIP HAS BEEN THE UNDERLYING ELEMENT IN MAKING THE CENTRAL ARIZONA PROJECT BECOME A REALITY.

THANK YOU.

Mr. BEVILL. Very good, and I certainly endorse what you have said about our colleague, Eldon Rudd here, and this subcommittee is going to miss him because he has been one of the leaders very much out front on these water and energy projects throughout the nation, and nothing would please us more than to see him change his mind and stay with us.

Governor Babbitt, we are pleased to hear from you as always, and you may proceed. Your prepared statement will be made part of the record.

Governor BABBITT. Mr. Chairman, thank you very much.

I, too, come with a valedictory. This is my last year. I head into the sunset along with Senator Goldwater, Eldon Rudd, and others—not exactly into the sunset. In that respect I note there are Oregonians in here and I want you to know I heartily endorse their water project.

I have brought with me the usual suspects from Arizona, who have been introduced. There are supporting statements from the Maricopa-Stanfield Irrigation and Drainage District, the Central Arizona District, New Magma Irrigation District, and once again from our friends at the Metropolitan Water District of Southern California.

If I may enter those in the record, I will refrain from reading them.

Mr. BEVILL. They will be made a part of the record.

[The Arizona statements follow:]

[illegible]

FOR THE HEARING RECORD, UNITED STATES CONGRESS, HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER HEARING ON FISCAL YEAR 1987 C.A.P. APPROPRIATIONS

Chairman and Committee Members:

The Arlington Canal Company, an Arizona corporation, whose business since 1898 has been the delivery of water in the Arlington Valley, opposes any appropriation for funding Plan 6 of the Central Arizona Project.

The Arlington Canal Company has property rights to that surface water which is to be impounded and re-allocated by Plan 6. Property rights are protected by the Constitution of the United States and cannot be taken without due process and compensation. Plan 6 will impinge upon, and perhaps completely destroy these property rights without providing either due process or compensation. The federal government should make no investment in a program that makes no provision for the protection of existing property rights.

Warren C. Gable
Warren C. Gable
Member, Board of Directors

Charles Wayne Vanosdell
Charles Wayne Vanosdell
Member, Board of Directors

STATEMENT BY
JOHN E. SMITH,
PRESIDENT OF
THE BOARD OF DIRECTORS
MARICOPA-STANFIELD IRRIGATION
& DRAINAGE DISTRICT,
AT HEARING BY
HOUSE APPROPRIATIONS SUBCOMMITTEE
ON ENERGY AND WATER DEVELOPMENT

APRIL 15, 1986

Mr. Chairman and Members of the Subcommittee:

My name is John E. Smith. I am President of the Board of Directors of the Maricopa-Stanfield Irrigation & Drainage District which comprises approximately 88,000 acres of irrigated land in northwestern Pinal County, Arizona. On behalf of the Board of Directors of the District, I wish to thank you for the opportunity to present this statement and to express our full support of the Governor's testimony which has been presented to you.

I am pleased to report to you that as a result of the generosity of your Subcommittee and the Congress with funding, construction of the first two units of the District's irrigation distribution system, namely the 56-mile long Santa Rosa Canal - Divisions A and B, is proceeding as scheduled and will be completed in the summer of 1987 for initial delivery of Central Arizona Project water to District lands. Bids on our first distribution lateral unit will be opened next month. All five remaining units of our distribution system are in varying stages of design and the last unit is scheduled for completion during 1988.

The Santa Rosa Canal is a major feature of our distribution system which will convey water from the CAP Aqueduct to serve not only our District, but also the Ak-Chin and Papago Chuichu Indian communities, a portion of the Central Arizona Irrigation and Drainage District and some of the nearby Pinal County communities. The construction bids for both Divisions of the Santa Rosa Canal were below the Engineer's estimates and within the fund allowance for this work in the District's 1982 Project Feasibility Report.

The cost of constructing the District's distribution system Project is estimated at $97.5 million. The District issued $26 million in general obligation bonds to fund its share of the construction cost. To assist in keeping construction on schedule, the District is currently spending bond proceeds as "up front" financing at a rate of over $300,000 per month for legal, administrative and engineering costs relative to acquisition of rights-of-way, design and construction management. The District's cash contribution through March 1986 totals nearly $6.5 million, not including $4.6 million in interest payments on the bonds.

In addition to the $26 million in District bonds for distribution system construction, the District and its landowners are committed to substantial costs for on-farm improvements of irrigation ditches for water conveyance and laser controlled land levelling to achieve water conservation. Thus, the District's overall financial investment in the Project represents far more than the 20 percent required by the Colorado River Basin Project Act as amended. The Federal investment in the distribution system is of course fully reimbursable by the water users.

Timely completion of our distribution system and delivery of the CAP water is critical to the preservation of our farms and the economy of the communities in our area, and to avoid the financial problems our landowners would face with the costs of operating wells for a full water supply and making bond payments at the same time if there would be a delay in delivery of CAP water.

The District would like to take this opportunity to acknowledge the excellent cooperation we have received from the Bureau of Reclamation at all levels and in particular in the day-to-day activities with the Arizona Projects Office in Phoenix.

We wish to again thank the Subcommittee for its consideration and past generosity to the Central Arizona Project. With timely appropriations by Congress and the use of our bond money, we are confident that our partnership arrangement with the United States will bring long-awaited CAP water to our lands as scheduled.

STATEMENT BY
ROBERT F. BARCELLO,
PRESIDENT OF
THE BOARD OF DIRECTORS
NEW MAGMA IRRIGATION & DRAINAGE DISTRICT,
AT HEARING BY
HOUSE APPROPRIATIONS SUBCOMMITTEE
OF ENERGY AND WATER DEVELOPMENT

April 15, 1986

Mr. Chairman and Members of the Subcommittee:

My name is Robert F. Barcello. I am President of the Board of Directors of the New Magma Irrigation & Drainage District which comprises approximately 27,000 acres of irrigated land in northeastern Pinal County, Arizona. On behalf of the Board of Directors of the District, I wish to thank you for the opportunity to present this statement and to express our full support of the Governor's testimony which has been presented to you.

I am pleased to report to you, that as a result of the generosity of your Subcommittee and the Congress with funding, all four of our District's distribution lateral systems, including the necessary pumping plants, are currently under construction and will be completed early in 1987. In fact, Lateral Systems A and B, our first two systems, are scheduled to deliver CAP water this summer to about 9,000 acres. We will soon be proceeding with contracts for construction of the District's office and shop facilities, purchase of the required operation and maintenance equipment, and installation of farm turnout meters and the operational control system. We have employed a Manager and will be employing additional staff in preparation for operation of our Project.

The cost of constructing the Project distribution system is estimated to be $21.9 million. The bids for construction work currently in progress have been within the fund allowance in the District's 1982 Project Feasibility Report. The District issued $7.1 million in general obligation bonds to fund its share of the construction cost. To assist in keeping construction on schedule, the District is currently spending bond proceeds as "up-front" financing at a rate of over $100,000 per month for legal, administrative and engineering costs relative to acquisition of rights-of-way, design and construction management. The District's cash contribution through March 1986 totals nearly $2.7 million, not including $1.3 million in interest payments on the bonds.

In addition to the $7.1 million in District bonds for distribution system construction, the District and its landowners are committed to substantial costs for on-farm improvements of irrigation ditches for water conveyance and laser controlled land levelling to achieve water conservation. Thus the District's overall financial investment in the Project represents far more than the 20 percent required by the Colorado River Basin Project Act as amended. The Federal investment in the distribution system is of course fully reimbursable by the water users.

Timely completion of our distribution system and delivery of the CAP water is critical to the preservation of our farms and the economy of the communities in our area, and to avoid the financial problems our landowners would face with the costs of operating wells for a full water supply and making bond payments at the same time if there would be a delay in delivery of CAP water.

The District would like to take this opportunity to acknowledge the excellent cooperation we have received from the Bureau of Reclamation at all levels and in particular in the day-to-day activities with the Arizona Projects Office in Phoenix.

We wish to again thank the Subcommittee for its consideration and past generosity to the Central Arizona Project. With timely appropriations by Congress and the use of our bond money, we are confident that our partnership arrangement with the United States will bring long-awaited CAP water to our lands as scheduled.

STATEMENT BY
NORMAN PRETZER
PRESIDENT OF
THE BOARD OF DIRECTORS
CENTRAL ARIZONA IRRIGATION
AND DRAINAGE DISTRICT,
AT HEARING BY
HOUSE APPROPRIATIONS SUBCOMMITTEE
ON ENERGY AND WATER DEVELOPMENT

April 15, 1986

Mr. Chairman and Members of the Subcommittee:

My name is Norman Pretzer. I am President of the Board of Directors of the Central Arizona Irrigation and Drainage District which comprises approximately 87,000 acres of irrigated land in south-central Pinal County, Arizona. On behalf of the Board of Directors of the District, I wish to thank you for the opportunity to present this statement and to express our full support of the Governor's testimony which has been presented to you.

I am pleased to report to you that, as a result of the generosity of your Subcommittee and the Congress with funding, construction of the Santa Rosa Canal and the North Distribution System, the first two units of the District's irrigation distribution system, is proceeding as scheduled and will be completed by the summer of 1987 for initial delivery of Central Arizona Project water to District lands. The Santa Rosa Canal will convey water from the CAP Aqueduct to serve not only the northern 17,000 acres of our District, but also the Ak-Chin and Papago Chuichu Indian communities, the Maricopa-Stanfield Irrigation & Drainage District and some of the nearby Pinal County communities. The construction bids for both the Santa Rosa Canal and the North Distribution System were below the Engineer's estimates and within the fund allowance for this work in the District's 1982 Project Feasibility Report.

Construction will begin this summer on the Central Main Canal, a 17-mile long main conveyance facility. All eight remaining units of our distribution system are in varying stages of design and the last unit is scheduled for completion during 1989.

The cost of constructing the District's distribution system Project is estimated at $83.6 million. The District issued $22.7 million in general obligation bonds to fund its share of the construction cost. To assist in keeping construction on schedule, the District is currently spending bond proceeds as "up front" financing at a rate of over $250,000 per month for legal, administrative and engineering costs relative to acquisition of rights-of-way, design and construction management. The District's cash contribution through March 1986 totals over $3.0 million, not including $4.2 million in interest payments on the bonds.

In addition to the $22.7 million in District bonds for distribution system construction, the District and its landowners are committed to substantial costs for on-farm improvements of irrigation ditches for water conveyance and laser controlled land levelling to achieve water conservation. Thus, the District's overall financial investment in the Project represents far more than the 20 percent required by the Colorado River Basin Project Act as amended. The Federal investment in the distribution system is of course fully reimbursable by the water users.

Timely completion of our distribution system and delivery of the CAP water is critical to the preservation of our farms and the economy of the communities in our area, and to avoid the financial problems our landowners would face with the costs of operating wells for a full water supply and making bond payments at the same time if there would be a delay in delivery of CAP water.

The District would like to take this opportunity to acknowledge the excellent cooperation we have received from the Bureau of Reclamation at all levels and in particular in the day-to-day activities with the Arizona Projects Office in Phoenix.

We wish to again thank the Subcommittee for its consideration and past generosity to the Central Arizona Project. With timely appropriations by Congress and the use of our bond money, we are confident that our partnership arrangement with the United States will bring long-awaited CAP water to our lands as scheduled.

TESTIMONY OF THE
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
ON APPROPRIATIONS FOR THE
CENTRAL ARIZONA PROJECT
BEFORE THE
SUBCOMMITTEE ON ENERGY AND WATER
COMMITTEE ON APPROPRIATIONS
APRIL 15, 1986

The Metropolitan Water District of Southern California again wishes to advise your Committee that it supports appropriations for the Central Arizona Project. The Project, which saw its first regularly scheduled water deliveries into the Phoenix reaches of the Aqueduct this fiscal year, still has substantial work to complete before its benefits reach all the areas contemplated in the authorizing legislation. The major works to deliver water into the Tucson area are just underway and funding levels must be adequate to keep this construction on schedule.

Metropolitan has been supportive of the Project since passage of the 1968 authorizing legislation. At that time benefits for the entire Colorado River Basin were developed and the needs of central Arizona were recognized. In the very arid regions of Arizona where seriously declining groundwater levels are being experienced, water demand is increasing to serve its rapidly expanding population.

Arizona has taken major steps to improve its own local resource management with the adoption of groundwater protection legislation and water conservation measures. It has put its own house in order and now its last resource, the Colorado River, must be developed to supplement its local resources.

Governor **Babbitt**. Thank you, Mr. Chairman.

Mr. Chairman, I will just say a few brief words.

I truly sense that we are doing well and that we would not have made it this far without your consistent understanding, support, friendship and help. It is paying off. The project is now past the midpoint. Water is now in Phoenix. The treatment plants are being built. Irrigation districts are putting in their infrastructure and the water is actually in the desert.

The desert is at last sharing water with the Colorado River. It is an incredible sight and it is an incredible vision come true.

I think it is a testimonial to the kind of participation between this Congress and the people of the small western state who came here generations ago to say to this Congress, "We cannot do it without you." It is a promise that has been kept through thick and thin, through some very, very difficult times, and it is a tribute to generations of political leaders. I can hardly name them all except to acknowledge the people who are here, especially Mo Udall, Eldon Rudd and yourself.

Let me just say a few words about where I think we are. The importance of this project is the way it has been shaped across all of this period of time. It has changed as it has gone along. I think now embodies things of which we can all be proud.

It is not just a reclamation project. It is a project that brought with it a revolution in water management. Arizona now has the most intensive, detailed water management system in the United States. It was done with prompting of this Congress which said to us if you want a water project, you better get serious about living within the limits which are always there, and this really is the last offer and we would like the offer of a management system that could be a model for other states, and that will guarantee us that Arizona has its water consumption and its thirst under control.

That has happened. I think it reflects well on both the Federal government and Arizona.

The importance of that ceremony this morning with the Secretary of Interior is this issue of cost-sharing. When I came up here eight, nine years ago, I began to see the handwriting on the wall in kind of a gentle suggestion from many of the people, including yourself, that we better look at reality and that agreement signed today, I think, is a manifestation of that reality.

We are willing to put our money where our mouth is. We recognize times are changing and that it is no longer enough to say that it is the Federal responsibility. It is a two way street. That is what that agreement is all about.

Lastly, you will hear, Mr. Chairman, later on this afternoon from two Arizona Indian tribes, the Salt River and Fort McDowell Indian tribes. They will be here to make a very focused case for water settlements for their tribes.

We have recognized from the very start that part of our responsibility is to help the Federal government discharge its trust responsibility to these Western Indian tribes. Part of this new order is coming here and saying we recognize that that is a real issue, it is a Federal responsibility, but it is our responsibility to develop these projects in a way to take care of those claims.

Now, with the vision and leadership of Mo here, we have done that with the Pappago Tribe, with the Akchin Tribe in southern Arizona, we have water contracts with a variety of other Indian tribes.

The process isn't quite done, and I would simply say to you the claims that are being put forward by the Indian tribes you will hear from are important, and must be resolved and I avow to you that we are going to get it done, we are going to get it done the same way we dealt with cost-sharing, water management, with all the other issues.

I think they have a claim that is important, and it is important to get it resolved.

In my testimony there are some comments on some of the other flood control and a dam safety issue. You have been generous to us through the years. I will simply direct your attention to those and in conclusion, simply say it has been an honor and a privilege to join with you in this process. In many ways this process, has been the most rewarding part of my entire career as Governor.

I thank you and Mr. Chairman, I wish you as we all depart, a long, long tenure in this Congress, because we still ain't there. We need you.

Thank you.

[The statement of Governor Babbitt follows:]

TESTIMONY OF GOVERNOR BRUCE BABBITT
TO THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS OF THE
UNITED STATES HOUSE OF REPRESENTATIVE

Washington, D.C.
April 15, 1986

MR. CHAIRMAN, AND MEMBERS OF THIS IMPORTANT COMMITTEE, I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOU ONCE AGAIN IN SUPPORT OF FUNDING FOR CONTINUED CONSTRUCTION OF THE CENTRAL ARIZONA PROJECT. EXCELLENT PROGRESS HAS BEEN MADE SINCE MY LAST APPEARANCE BEFORE THIS COMMITTEE ON ALL FRONTS ON THE CAP.

COLORADO RIVER WATER HAS ALREADY BEEN DELIVERED, THROUGH THE GRANITE REEF AQUEDUCT, TO THE CITY OF PHOENIX AT ITS UNION HILLS WATER TREATMENT PLANT, TO THE HARQUAHALA VALLEY IRRIGATION DISTRICT AND TO THE MARICOPA WATER DISTRICT. THE ARRIVAL OF CENTRAL ARIZONA PROJECT WATER WAS CELEBRATED LAST NOVEMBER IN PHOENIX BY A JOYFUL GROUP REPRESENTING FOUR GENERATIONS OF PROJECT SUPPORTERS.

THE SALT/GILA AQUEDUCT, WHICH LINKS THE GRANITE REEF AND TUCSON AQUEDUCTS, IS ALSO COMPLETE. THE FIRST DELIVERIES OF COLORADO RIVER WATER TO PINAL COUNTY WILL BE MADE THIS SUMMER.

CONSTRUCTION OF THE TUCSON AQUEDUCT IS PROGRESSING WELL WITH ALL ELEMENTS OF PHASE A UNDER CONTRACT. THE ROUTE FOR PHASE B HAS BEEN SELECTED AND CONSTRUCTION WILL BEGIN THIS SPRING. COMPLETION OF THE TUCSON AQUEDUCT AND INITIAL WATER DELIVERIES TO SOUTHERN ARIZONA ARE EXPECTED IN 1991.

IN AN EFFORT TO BE READY TO RECEIVE CAP WATER AS SOON AS IT IS AVAILABLE, IRRIGATION DISTRICTS HAVE COMPLETED CONSTRUCTION OF OVER 100 MILES OF CANALS WITH ANOTHER 500 MILES UNDER CONSTRUCTION OR ON THE DRAWING BOARDS. THE CITIES OF PHOENIX, GLENDALE, MESA, SCOTTSDALE, AND TUCSON ARE IN THE PROCESS OF PLANNING, BUILDING OR COMPLETING TREATMENT PLANTS FOR COLORADO RIVER WATER.

DISTRIBUTION SYSTEMS ARE PLANNED OR UNDER CONSTRUCTION ON THE 12 INDIAN RESERVATIONS WHICH HAVE CAP ALLOTMENTS. THE FEDERAL GOVERNMENT HAS CONTRACTED TO DELIVER WATER TO THE AK-CHIN RESERVATION BY 1988 AND TO THE SAN XAVIER AND SCHUK TOAK DISTRICTS OF THE TOHONO O'ODHAM RESERVATION BY 1991. DELAYS BEYOND THESE DATES IMPOSE SERIOUS FINANCIAL PENALTIES ON THE FEDERAL GOVERNMENT.

WE ANTICIPATE THAT DEMAND FOR CAP WATER WILL FAR EXCEED THE SUPPLY. MUNICIPAL AND INDUSTRIAL ALLOTTEES HAVE ALREADY ENTERED INTO SUBCONTRACTS FOR OVER 454,000 ACRE-FEET, OR ABOUT 71 PERCENT OF THE SUPPLY AVAILABLE FOR M&I USE. IRRIGATED AGRICULTURE HAS CONTRACTED FOR OVER 70 PERCENT OF THE PROJECT'S AGRICULTURAL SUPPLY. THE CONTRACTING PROCESS IS PROCEEDING ON SCHEDULE AND THE FULL WATER SUPPLY IS EXPECTED TO BE UNDER CONTRACT TO FACILITATE DELIVERIES AS PROJECT FEATURES, DISTRIBUTION SYSTEMS AND TREATMENT FACILITIES ARE COMPLETED.

IN SUMMARY, THE PAST YEAR HAS BEEN A PRODUCTIVE ONE FOR THE CENTRAL ARIZONA PROJECT. THE TERMINUS NEAR TUCSON IS IN SIGHT, FARM DISTRIBUTION SYSTEMS ARE UNDER CONSTRUCTION AND WATER DELIVERIES WERE MADE ON SCHEDULE TO HARQUAHALA VALLEY AND MARICOPA WATER IRRIGATION DISTRICTS AND THE CITY OF PHOENIX. STILL, THERE IS MUCH WORK TO BE DONE TO COMPLETE THE AUTHORIZED FEATURES OF THE PROJECT. THE TUCSON AQUEDUCT, PLAN 6, AND INDIAN AND NON-INDIAN DISTRIBUTION SYSTEMS ARE ESSENTIAL FOR ARIZONA TO EFFICIENTLY UTILIZE ITS COLORADO RIVER ENTITLEMENT.

RECOGNIZING THIS, ARIZONANS HAVE BEEN WORKING DILIGENTLY, ALONG WITH REPRESENTATIVES OF THE SECRETARY OF INTERIOR, ON A COST SHARING AGREEMENT COVERING THE REMAINING WORK TO BE COMPLETED ON THE CAP. I AM PLEASED TO REPORT TO YOU THAT THIS HISTORIC COST SHARING AGREEMENT HAS BEEN EXECUTED. UNDER THE AGREEMENT ARIZONA INTERESTS WILL ADVANCE AN ESTIMATED $371 MILLION TOWARD THE CONSTRUCTION COST OF PLAN 6 FEATURES IN RETURN FOR FEDERAL ASSURANCES THAT ALL FEATURES OF THE CAP WILL BE COMPLETED BY 1997. TO MEET THIS DATE FEDERAL FUNDING FOR THE CAP MUST EXCEED $200 MILLION IN EACH OF THE NEXT THREE BUDGET YEARS AND AN ESTIMATED $180 MILLION EACH YEAR THEREAFTER UNTIL COMPLETION.

OVER THE YEARS ARIZONA HAS BEEN BLESSED WITH OUTSTANDING REPRESENTATION IN CONGRESS. SINCE THE FIRST EFFORTS TO AUTHORIZE THE CENTRAL ARIZONA PROJECT BEGAN IN THE 1940's EVERY CONGRESSMAN AND EVERY SENATOR FROM THE STATE OF ARIZONA HAS AGRESSIVELY SUPPORTED THE PROJECT. OUR DELEGATION HAS BEEN UNITED ON ALL ISSUES AFFECTING THE CAP AND CONTINUES TO BE UNITED IN SUPPORT OF THE COST SHARING AGREEMENT AND THE LEVEL OF FEDERAL AND LOCAL FUNDING NECESSARY TO CARRY IT OUT.

WHY HAS OUR DELEGATION REMAINED UNITED ON CAP ISSUES FOR OVER 40 YEARS? BECAUSE COMPLETION OF THE CAP AT THE EARLIEST PRACTICABLE DATE IS VITAL TO OUR STATE. WATER IS BEING CONSUMED IN ARIZONA AT ALMOST TWICE THE REPLENISHMENT RATE. THE DIFFERENCE REPRESENTS A CONTINUING OVERDRAFT OF IRREPLACEABLE GROUNDWATER RESOURCES. I AM PLEASED TO REPORT, HOWEVER, THAT WE ARE TAKING THE NECESSARY ACTIONS TO OVERCOME THIS "DEFICIENT SPENDING" APPROACH TO WATER SUPPLY. IN 1980 ARIZONA ADOPTED THE MOST COMPREHENSIVE GROUNDWATER

MANAGEMENT CODE IN THE COUNTRY DESIGNED TO ASSURE A BALANCE BETWEEN WATER USE AND SUPPLY BY THE YEAR 2025. WE ARE WELL ON OUR WAY IN IMPLEMENTING THE CODE. WE HAVE QUANTIFIED GROUNDWATER RIGHTS AND ADOPTED MANDATORY CONSERVATION REQUIREMENTS. HOWEVER, ACHIEVING THE GOAL OF A BALANCE BETWEEN WATER SUPPLY AND CONSUMPTION IS DEPENDENT UPON TIMELY COMPLETION OF THE CENTRAL ARIZONA PROJECT. ARIZONA'S REMAINING ENTITLEMENT OF COLORADO RIVER WATER WILL OFFSET ABOUT TWO-THIRDS OF THE GROUNDWATER OVERDRAFT IN CENTRAL AND SOUTHERN ARIZONA.

COMPLETION OF THE CAP IS CRITICAL FOR ANOTHER REASON - FLOOD CONTROL. THE PHOENIX METROPOLITAN AREA IS THE MOST POPULATED AREA IN THE UNITED STATES THAT IS BISECTED BY A MAJOR RIVER SYSTEM, BUT DOES NOT HAVE A SINGLE ACRE-FOOT OF RESERVOIR STORAGE SPACE DEDICATED TO FLOOD CONTROL. AS A RESULT, ONE OF THE MOST RAPIDLY GROWING AREAS IN OUR COUNTRY HAS BEEN RAVAGED REPEATEDLY BY FLOOD FLOWS IN RECENT YEARS. THIS FLOODING COULD BE CONTROLLED WITH UPSTREAM RESERVOIR STORAGE SPACE RESERVED FOR FLOOD CONTROL.

THE RISK OF FLOODING IN THE PHOENIX METROPOLITAN AREAS WAS MAGNIFIED A FEW YEARS AGO WITH THE DISCOVERY OF MAJOR SAFETY PROBLEMS AT SIX EXISTING UPSTREAM WATER CONSERVATION RESERVOIRS. FAILURE OF ANY OF THESE DAMS WOULD HAVE CATASTROPHIC IMPACTS ON THE CITIES BELOW.

THE FEATURES OF PLAN 6 WILL PROVIDE THE CHEAPEST INSURANCE AGAINST THESE TWO HIGH RISK DANGERS, WHILE ALSO PROVIDING ADDITIONAL WATER SUPPLY AND POWER BENEFITS. WE MUST GET THESE DAMS IN PLACE AS SOON AS POSSIBLE.

ARIZONANS RECOGNIZE THE IMPORTANCE OF WATER MANAGEMENT. WE HAVE ENACTED PROGRESSIVE STATE LAWS AND ACCEPTED THE NEED TO FUND UP-FRONT A PORTION OF THE CAP. THE COST SHARING AGREEMENT WE HAVE SIGNED WITH THE SECRETARY IS AN HISTORIC DOCUMENT, ONE THAT WARRANTS YOUR FULL SUPPORT. RECOGNIZING THE SIGNIFICANCE OF THE AGREEMENT, PRESIDENT REAGAN HAS RECOMMENDED AN APPROPRIATION OF $204 MILLION FOR THE CAP IN HIS FY 1987 BUDGET. THE PRESIDENT'S BUDGET CALLED FOR A NON-FEDERAL CONTRIBUTION OF $8 MILLION. I HAVE BEEN ADVISED THAT THESE AMOUNTS ARE SUFFICIENT TO MAINTAIN THE CONSTRUCTION SCHEDULES SET FORTH IN THE AGREEMENT AND FOR THE BUREAU OF RECLAMATION TO PERFORM THE NECESSARY ENGINEERING AND ADMINISTRATION FOR EFFICIENT EXECUTION OF THE AGREEMENT.

I URGE YOUR SUPPORT OF THE PRESIDENT'S REQUEST FOR $204 MILLION FOR FY 1987 IN THIS CRUCIAL FIRST YEAR OF OUR COST SHARING AGREEMENT.

LET ME TAKE THIS OPPORTUNITY TO ADDRESS OTHER FUNDING MATTERS. I AM PLEASED THAT THE U.S. ARMY CORPS OF ENGINEERS HAS INITIATED CONSTRUCTION OF THE FINAL FEATURE OF THE PHOENIX, ARIZONA AND VICINITY PROJECT, THE ARIZONA CANAL DIVERSION CHANNEL. THE COMPLETION

OF THIS PORTION OF THE PROJECT WILL PROVIDE THE PHOENIX METROPOLITAN AREA A HIGH DEGREE OF FLOOD PROTECTION. I ENCOURAGE YOU TO CONTINUE FUNDING AT THE OPTIMAL LEVEL TO ENSURE TIMELY COMPLETION OF THE PROJECT.

IN ADDITION, THE CORPS HAS SEVERAL FLOOD CONTROL STUDIES UNDERWAY IN OTHER AREAS OF THE STATE. I STRONGLY SUPPORT THE CORPS EFFORTS ON THE GILA RIVER AND ITS TRIBUTARIES, ALONG NOGALES WASH IN THE SOUTHERN PORTION OF THE STATE, ALONG THE RILLITO RIVER NEAR TUCSON, AND NEAR CLIFTON AND SAFFORD IN THE EASTERN PORTION OF THE STATE. ALL OF THESE AREAS HAVE RECENTLY BEEN RAVAGED BY SEVERE FLOODING.

MR. CHAIRMAN, I WANT TO ALSO TAKE THIS OPPORTUNITY TO DISCUSS THE BUREAU OF RECLAMATION COLORADO RIVER WATER QUALITY IMPROVEMENT PROGRAM. WHEN CAP BECOMES FULLY OPERATIONAL ARIZONA'S COLORADO RIVER SOURCE WILL REPRESENT OVER 60 PERCENT OF THE STATE'S DEPENDABLE SUPPLY. WE ARE VERY CONCERNED ABOUT THE SALINITY LEVELS OF THIS ESSENTIAL SUPPLY. THE PRESIDENT'S BUDGET INCLUDES $28.8 MILLION FOR CONSTRUCTION AND PLANNING OF FACILITIES UNDER THE BUREAU'S PROGRAM. I URGE YOUR SUPPORT OF THE BUDGETED AMOUNT.

I WOULD ALSO LIKE TO THANK THE COMMITTEE FOR DIRECTING THE U.S. BUREAU OF RECLAMATION, IN YOUR APPROPRIATIONS REPORT FOR FISCAL YEAR 1986, TO PROCEED EXPEDITIOUSLY WITH SAFETY OF DAMS MODIFICATIONS ON THE SALT AND VERDE RIVERS.

IT IS MY UNDERSTANDING THAT THE ADMINISTRATION'S BUDGET ATTEMPTS TO DO JUST THAT. FUNDS INCLUDED IN THE CENTRAL ARIZONA PROJECT APPROPRIATION, ALONG WITH $1.1 MILLION FOR ROOSEVELT DAM AND $2.2 MILLION FOR STEWART MOUNTAIN DAM PROVIDED IN THE SAFETY OF DAMS PROGRAM, WOULD PERMIT PRECONSTRUCTION WORK TO GO FORWARD AT THESE DAMS. HOWEVER, I AM ADVISED THAT IN ORDER FOR ESSENTIAL PRE-CONSTRUCTION ACTIVITIES TO CONTINUE IN A TIMELY FASHION AT ROOSEVELT DAM, THE BUREAU OF RECLAMATION REQUIRES AN ADDITIONAL $3.1 MILLION.

THE IMPORTANCE OF THESE DAM SAFETY MODIFICATIONS WAS PUT INTO SHARP PERSPECTIVE BY EXTRAORDINARY EVENTS SIX YEARS AGO WHEN A SERIES OF WARM STORMS MOVED INTO ARIZONA, STRIPPING THE MOUNTAIN WATERSHED OF ITS SNOW COVER AND DUMPING A RECORD 16 INCHES OF RAIN INTO THE STREAMS AND TRIBUTARIES THAT FEED THE DAMS ON THE SALT AND VERDE RIVERS.

ON THE EVENING OF FEBRUARY 15, 1980, I WAS INFORMED THAT STILL ANOTHER STORM WAS EXPECTED BY MORNING AND THAT THE RAIN WOULD CAUSE STEWART MOUNTAIN DAM TO OVERTOP AND, ULTIMATELY, TO FAIL. I ORDERED STATE AND LOCAL EMERGENCY SERVICE OFFICIALS TO PREPARE FOR THE EVACUATION OF EVERYONE LIVING WITHIN A MILE OF BOTH BANKS OF THE SALT RIVER IN DOWNTOWN PHOENIX.

I WENT ON RADIO AND TELEVISION TO WARN THE PHOENIX METROPOLITAN AREA TO BE PREPARED FOR THE POSSIBILITY OF A DISASTER GREATER THAN ANYTHING ARIZONA HAD KNOWN. AT THE LAST MINUTE, THAT STORM VEERED SOUTH, AND THE VALLEY WAS SPARED.

THE POSSIBILITY OF THAT KIND OF DISASTER IS NO LESS REAL TODAY THAN IT WAS SIX YEARS AGO. IF THE 1.8 MILLION PEOPLE OF THE PHOENIX METROPOLITAN AREA WERE TO EXPERIENCE SUCH A TRAGEDY, THE DESTRUCTION AND DEVASTATION WOULD EXCEED THE TOLL TAKEN IN CALIFORNIA DURING THE FLOODING THERE LAST FEBRUARY.

THEREFORE, I RESPECTFULLY URGE THIS COMMITTEE TO PROVIDE THE BUREAU OF RECLAMATION WITH THE LEVEL OF FUNDING REQUIRED TO EXPEDITE COMPLETION OF THE SAFETY MODIFICATIONS ON THE SALT AND VERDE RIVERS.

WHILE I AM ENCOURAGED BY THE SUPPORT FOR SAFETY OF DAMS MODIFICATION ON THE SALT AND VERDE RIVERS, I AM CONCERNED ABOUT THE SITUATION AT COOLIDGE DAM ON THE GILA RIVER. THE BUREAU OF INDIAN AFFAIRS IS THE OWNER/OPERATOR OF THIS DAM WHICH IS IN NEED OF REPAIRS TO MEET SAFETY STANDARDS. NO FUNDS ARE IN THE ADMINISTRATION'S BUDGET FOR THE BUREAU OF RECLAMATION TO COMPLETE STUDIES TO DETERMINE THE EXTENT AND COST OF WORK NECESSARY TO MAKE REPAIRS TO THE DAM. I UNDERSTAND THE COST OF THESE STUDIES IS ESTIMATED TO BE ABOUT $500,000 AND THE BUREAU HAS THE CAPABILITY TO UNDERTAKE THE WORK. I ENCOURAGE YOU TO FUND THIS NEEDED WORK IN THE DEPARTMENT OF THE INTERIOR'S BUDGET.

MR. CHAIRMAN, A WORD ABOUT THE CONCERNS OF THE SALT RIVER PIMA-MARICOPA AND FT. McDOWELL MOHAVE-APACHE INDIAN COMMUNITIES OVER PLAN 6 AND THEIR WATER RIGHTS. NEGOTIATIONS TO SETTLE THE TRIBES' WATER RIGHTS ARE CURRENTLY UNDERWAY. I BELIEVE THE PLAN 6 FACILITIES WILL HELP FACILITATE RATHER THAN HINDER A RESOLUTION OF THE TRIBES' RIGHTS. RATHER THAN HOLD UP CONSTRUCTION OF NEW RESERVOIRS ON THE SALT AND VERDE RIVERS UNTIL THE WATER RIGHTS ISSUES ARE RESOLVED, WE SHOULD PROCEED ON BOTH FRONTS. I STRONGLY SUPPORT THE CURRENT NEGOTIATIONS AND IF IT WILL BE OF VALUE I WILL PERSONALLY INVOLVE MYSELF TO ASSURE THAT EVERY REASONABLE EFFORT IS MADE TO REACH AN ACCEPTABLE SOLUTION.

WE THANK THE COMMITTEE FOR ITS CONTINUING, STRONG SUPPORT OF WATER RESOURCE DEVELOPMENT IN ARIZONA.

Mr. **Bevill**. Thank you.

Mayor Goddard, we would be glad to hear from you.

Mr. **Goddard**. Thank you, Mr. Chairman.

Mr. Chairman, I am Terry Goddard, Mayor of Phoenix, Arizona, and as such somewhat a new player in these regular hearings on the Central Arizona Project. But just today Phoenix and four other cities in Central Arizona became partners in this project through the signing of the historic agreement that has been referred to. Therefore, I am very pleased to be here and to concur with what the Governor and Members of Congress have said in terms of supporting the Central Arizona project, and specifically the funding presented in President Reagan's budget request.

The request recognizes a new relationship between the United States and the Central Arizona Project beneficiaries. That relationship is memorialized in the agreement which was signed today between the United States and eleven parties, and which will bring approximately $370 million in local cost-sharing to this project between September 1986 and 1995.

During the next nine years, the City of Phoenix will contribute over $33 million to assure completion of the Central Arizona Project. In addition, Phoenix water customers will contribute over $140 million over the life of the project towards repayment of the CAP, as provided by law.

We recognize the wisdom of local participation and appreciate the leadership and support of the Congress and the Administration in developing a fair cost-sharing agreement.

The Central Arizona cities have repeatedly affirmed the high priority of the CAP by our political and financial commitments. I ask this committee to support the President's appropriation request so the United States and the people of Arizona can finish the project as partners.

Thank you, Mr. Chairman.

[The statement of Mr. Goddard follows:]

TESTIMONY OF MAYOR

TERRY GODDARD, CITY OF

PHOENIX, ARIZONA

ON THE CENTRAL

ARIZONA PROJECT

APRIL 15, 1986

Mr. Chairman, Committee Members; my name is Terry Goddard. I am the Mayor of the City of Phoenix. I am pleased to be able to actively support the Central Arizona Project funding presented in President Reagan's budget request. The President's request recognizes a new relationship between the United States and Central Arizona Project beneficiaries. That relationship is memorialized in the cost-sharing agreement between the United States and eleven Arizona parties which will bring at least $373 million in local cost-sharing to this project between September 1986 and 1995. To my knowledge, this historic agreement reflects the first time that a cost-sharing arrangement has been reached on an already authorized project which was under active construction.

During the next nine years, the City of Phoenix alone will contribute over $33 million to assure completion of the Central Arizona Project including the modification of Roosevelt Dam and construction of Cliff Dam providing water conservation, flood control and dam safety. In addition, Phoenix water customers will contribute over $140 million over the life of the project toward repayment of the CAP as provided by law. We have recognized the wisdom of local participation in flood control, water development and hydroelectric projects and appreciate the leadership and support of the Congress and Administration in developing a fair cost-sharing arrangement.

We have affirmed the high priority of the Central Arizona Project by both our political and financial commitment. I would ask that this Committee support the President's appropriation request so that the United States and the people of Arizona can finish the project as partners.

Thank you, Mr. Chairman.

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Mr. **Bevill.** Thank you.

Are there any other statements? We thank you very much for a very fine presentation. We will certainly be working with you and your delegation.

Mr. **Udall.** Thank you, Mr. Chairman.

[The following statements were submitted for the record:]

BOB STUMP
3d District, Arizona

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(202) 225-4576

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Congress of the United States
House of Representatives
Washington, D.C. 20515

ARMED SERVICES COMMITTEE

PERMANENT SELECT
COMMITTEE ON INTELLIGENCE

VETERANS' AFFAIRS
COMMITTEE

Statement of
CONGRESSMAN BOB STUMP
before the
House Appropriations Subcommittee on
Energy and Water Development
April 15, 1986

Mr. Chairman, it is a pleasure for me to join with my colleagues in supporting the FY87 $203 million appropriation request for the Central Arizona Project, and to be able to thank you and the other Members of the Subcommittee for their continuing interest and support for the C.A.P.

The Central Arizona Project is ripe with the history of hard work, and indeed the celebration last fall of the first water deliveries to Phoenix through the canals of the Project would not have been possible without the hard work and dedication of many far-sighted people who realize the potential of Arizona's future and its need for water. The appropriations request which you are considering will insure that we move closer to the completion of the Central Arizona Project in a timely manner, and in line with the commitments that have been made with the many federal and local partners involved.

Today also represents another chapter of hard work in the history of C.A.P. Recognizing the constraints of the federal budget, the State of Arizona undertook a process which met the need for costsharing in federal reclamation projects, and has today completed an agreement with the federal government which will insure the continued progress and completion of the Central Arizona Project.

Mr. Chairman, I believe that we have a Project whose success speaks for itself and that meets, for the most part, the broad needs of a rapidly-growing area of this country. Your continued support of the Central Arizona Project, both in terms of funding and your personal interest, are most appreciated.

NATIONAL AUDUBON SOCIETY
Southwest Region • Santa Fe Office
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March 19, 1986

Congressman Tom Bevill, Chairman
House Energy and Water Development Subcommittee
2632 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Bevill:

I am requesting that this testimony be submitted for the record on the FY87 Energy and Water Appropriations bill. This year perhaps more than any other it is incumbent upon all of us to find ways to trim the budget.

Thank you for considering this testimony.

Sincerely,

David Henderson
New Mexico State Representative
National Audubon Society

kec

AMERICANS COMMITTED TO CONSERVATION

NATIONAL AUDUBON SOCIETY
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STATEMENT

by

DAVID HENDERSON
New Mexico State Representative
National Audubon Society

on

March 19, 1986

Submitted to the

HOUSE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE

AMERICANS COMMITTED TO CONSERVATION

On behalf of the National Audubon Society, one of the oldest and largest conservation organizations, with a membership of 500,000, and more specifically, speaking for the 4,000 members in the state of New Mexico, I would like to address this subcommittee concerning funding for the Upper Gila River Water Supply Project, a Bureau of Reclamation project in southwestern New Mexico. In these times of grave concern over the growing Federal deficit and the necessity of Congress to find ways to reduce that deficit and in light of the Gramm-Rudman-Hollings Bill it becomes incumbent upon all of us to find ways to cut spending. The Upper Gila River Water Supply Project or the Conner/Hooker Dam is one project that should not be funded as it is economically unsound, environmentally disastrous and simply not needed.

The Upper Gila Water Supply Project is the New Mexico unit of the Central Arizona Project (CAP). It was included as part of CAP at the time of its authorization in 1968 (Public Law 90-537). Since 1980 the planning for this portion of the CAP has moved ahead with most of the focus on the Bureau of Reclamations recommendation to build one of two proposed dams on the Gila River, either Connor or Hooker Dam. The primary purpose of the project is to supply New Mexico with its allotted 18,000 acre feet (AF) of CAP water as part of a trade agreement with downstream users. As planning goes on it is becoming increasingly clear that the Upper Gila River Water Supply Project is not, for southwestern New Mexico, the panacea it was intended to be back in 1968.

The first area of concern, and when considering appropriations probably the most important area, is economic. The economics of this project must be considered from two fronts, the cost of the Bureau of Reclamation project, the dam, and the cost of the water to the future user, primarily Silver City residents. The Connor/Hooker Dam proposal has been estimated to cost 100+ million dollars, with approximately $32+ million being paid by New Mexico users and the balance by downstream users in Arizona. The U.S. taxpayers would pay for the initial cost of construction and upon completion the treasury would be repaid by the water users. The water users would be subsidized by the treasury by a generous low interest loan of 3.342%.

What do the Silver City area water users stand to gain from this project? - Expensive unneeded water. Not only would the water users have to repay the $30+ million for the cost of constuction of the dam but on top of that they would have to pay for the delivery system. The delivery system would have to be about 20 - 25 miles long and would have to be capable of pumping water over the continental divide. Energy cost alone for this could reach the millions but that has not been determined since the delivery system segment is not part of the Bureau of Reclamations project.

Project delivery costs are but one way to look at the economics of western water. Another is the cost of water per acre foot. The New Mexico State Engineers Office has developed a number of scenarios in order to help consumers and themselves more clearly understand the cost of this project in terms of water per acre foot. One of these scenarios has all 10,000 AF of available water purchased by Silver City area residents. Based upon these conditions the cost per acre foot would be $902. Other possibilities show the cost going as high as $7,000/AF. It is safe to assume that costs will fall somewhere between these figures leaving Silver City with the most expensive water in the state. Even by western standards that is extremely expensive water. These high water costs are only compounded by the fact that the Silver City area is experiencing several economic hardships that will not be remedied by expensive water and a 50 year debt.

The second area of concern is that of need for Gila River water in Silver City. In 1984 the 15,000 residents of Silver City used 2,200 acre feet of water or 130 gallons per person per day. The city's water rights at that time were for 3,000 acre feet from the Mimbres and Gila Basins. The recent acquisition of the Gabby Hayes well by the city has added another 1433 acre feet to the city's water potential. It is obvious that the city cannot currently use the water it has and with the copper industry weakening in the area the potential for a large population influx necessary to stress the water limits is unlikely. But perhaps the most striking blow to the need for expensive Gila River water is the very strong likelihood of a large pool of water in the Mimbres Basin lying below the currently tapped aquifer. This untapped aquifer could supply Silver City with water at a fraction of the cost. As you can see, the question of need is a real one.

The third area of concern and perhaps the greatest concern to Audubon members is the environmental risks of the proposed project. To fully understand the environmental risks it is necessary to become familiar with the Gila River region. The river system drains 12,000 square miles of southwestern New Mexico and southeasten Arizona. The Gila is the last unregulated mainstem river flowing free for 200 miles through New Mexico. The headwaters start deep within the first wilderness area ever designated by Congress, the Gila Wilderness. Along its entire free flowing length riparian habitat dominates the riverside. These riparian areas are considered the most important wildlife and vegetative region in New Mexico, if not the entire Southwest. Over 250 species of birds have been documented in the Gila River Valley with up to 116 species of breeding riparian birds reported. This is the highest breeding riparian avifauna community in the Lower Colorado River drainage and probably the Southwest. Because of the importance of the riparian vegetation community to the abundant wildlife resources along the river, the U.S. Forest Service has set aside the Gila River Bird Management Unit. A second Forest Service area is the Gila River Research Natural Area, set aside for special research concerns. The Bureau of Land Management is managing an area in the vicinity of the proposed Connor dam as an Area of Critical Environmental Concern. The Nature Conservancy, a private habitat conservation organization has purchased 126 acres of critical riparian habitat along the river because this riverine habitat represents one of the top five seriously jeopardized vegetation and wildlife assemblages in the United States. The importance of protecting riparian habitat along the Gila becomes even more significant when considering that over 90% of the riparian habitat in the Southwest has already been lost due primarily to human disturbance.

Parallel to the riparian concerns are the aquatic considerations. The Gila is an unregulated mainstem river and because of that it supports one of the most intact native fish communities in existence in the Lower Colorado River Drainage. Two of these native fishes, the spikedace (Meda fulgida) and loach minnow (Tiaroga cobitis), are proposed for Federal listing under the Endangered Species Act. These two species of native fish have to date been eliminated from all but 6% and 15% of their original habitat, respectively.

As a result of the high value, unique characteristics and irreplaceability of the Gila River fish and wildlife habitat, the U.S. Fish and Wildlife Service has classified the river a Resource Category Number One as described in the Fish and Wildlife Service Mitigation Policy. This category designates that because impact to these habitats and resources cannot be mitigated, no loss of existing quality or quantity of habitat should occur. The National Audubon Society supports the Fish and Wildlife Service in this recommendation.

This year perhaps more than in any other year we need to look closely at how to cut the Federal budget. How nice if those savings could not only be reflected in real dollars but also in protection of our truely irreplaceable natural heritage. The National Audubon Society asks this subcommittee to act in the best interest of the American people and not appropriate funds for this project.

TUESDAY, APRIL 15, 1986.

COLUMBIA BASIN PROJECT

WITNESSES

HON. SID MORRISON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

REID PHILLIPS, PRESIDENT, COLUMBIA BASIN DEVELOPMENT LEAGUE AND FARMER

EARL TERWILLEGER, DIRECTOR, EAST COLUMBIA BASIN IRRIGATION DISTRICT AND PROJECT FARMER

DOYLE MATHEWS, DIRECTOR, SOUTH COLUMBIA BASIN IRRIGATION DISTRICT AND PROJECT FARMER

RUSSELL WENTWORTH, PRESIDENT, QUINCY-COLUMBIA BASIN IRRIGATION DISTRICT

CHAN D. BAILEY, EXECUTIVE SECRETARY, COLUMBIA BASIN DEVELOPMENT LEAGUE

PAUL OLBERDING, DIRECTOR, SOUTH COLUMBIA BASIN IRRIGATION DISTRICT

RICH STEVENS, DIRECTOR, QUINCY IRRIGATION DISTRICT AND FARMER

Mr. BEVILL. The committee come to order.

We are pleased to have our good friend and colleague, Congressman Sid Morrison.

Sid, you may present your prepared statement for the record and proceed as you wish.

Mr. MORRISON. Thank you, Mr. Chairman.

My role is a happy one, just to introduce a team of folks we have here from the Columbia Basin Project out in the great State of Washington.

I would like to just make one comment, Mr. Chairman, before introducing them, and that is that a little over 50 years ago a dream began to come true and that was the building of Grand Coulee Dam, which is a reclamation project and the associated Columbia Basin Development that goes with it. The project is approximately half completed now as far as the total irrigated acres are concerned, and the group today is here with some very elemental requests and that is in support of the budget that you have before you, which includes some elements of which are necessary for their project.

I would like to introduce, and raise your hand so they can see you when we call your name, Reid Phillips, President of the Columbia Basin Development and farmer in an undeveloped portion of the project; Earl Terwilleger, Director of East Columbia Basin Irrigation District and project farmer; Doyle Mathews, Director of South Columbia Basin Irrigation Project; Paul Olberding, Director of the South Columbia District and farmer; Russell Wentworth, Director of Columbia Basin Irrigation District and a farmer; Chan Bailey, Development Director, Columbia Irrigation District, and Executive Secretary of the Columbia Basin Development League; and Rich Stevens, Director and farmer in the Quincy Irrigation District.

I personally appreciate your time and that of the subcommittee in listening to their statement.

Mr. BEVILL. We certainly look forward to hearing from all of you.

Mr. **Morrison**. We will probably limit it today to one person making a statement.

Mr. **Bevill**. That would be fine.

Mr. **Wentworth**. I am Russ Wentworth with the Quincy Irrigation District, and we don't have a lot to ask for this year, mainly your support of the proposed budget for fiscal year 1987. We support it and we don't have any additional—we are not seeking additional funds for that.

All of this group are primarily farmers directly related to agriculture.

That is about the size of what we have to say.

[The statement and attachments of Mr. Wentworth follow:]

Columbia
Basin
Development
League

REGIONAL TRUSTEES
CHARLES BRYAN, *Farm Credit Banks, Spokane*
BRIAN BOYLE, *Commissioner of Public Land, Olympia*
LARRY EBBE, *Peoples National Bank, Yakima*
JOSEPH A HORRALL, *Burlington Northern Railroad, Seattle*
HOWARD GRANGER, *Regional Manager, Port of Seattle, Spokane*
JOHN ANDERSEN, *Seattle First National Bank, Seattle*

EX-OFFICIO TRUSTEES
DICK ERICKSON, *Manager, East Columbia Basin Irrigation District, Othello*
MERLE GIBBONS, *Manager, South Columbia Basin Irrigation District, Pasco*
HON. E.G. "PAT" PATTERSON, *Senator, State Legislature, Pullman*
HON. FRANK (TUB) HANSEN, *Senator, State Legislature, Moses Lake*
HON. EUGENE PRINCE, *Representative, State Legislature, Thornton*
HON. CURT SMITH, *Representative, State Legislature, Ephrata*
HON. GLYN CHANDLER, *Representative, State Legislature, Moses Lake*

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AREA TRUSTEES
Connell
ORMAN JOHNSON
Ellensburg
HAROLD BEEMAN
Ephrata
DON RECKNAGEL
BILL ROBINSON
Lind
BILL LOOMIS
ALBERT GROSS
Moses Lake
SAM CLARK
PAUL HIRAI
FRANK SHINN
GEORGE MASSART
STEVE SHINN
GEORGE WHITE
Odessa
HAROLD GIES
Othello
MARK BOOKER
DAN LEARY
GAYLE GAIETHER
*DUANE RAGSDALE
HARRY SARGENT
ROGER THIEME
MAX WEBB
Quincy
RICHARD TOEVS
Pasco
WISTAR BURGESS
SIG. T. HANSEN
DOROTHY SCHOEPPACH
JAMES O'CONNOR
BOB TIPPETT
ED WILLBORN
Ritzville
REX LYLE
JOE JANTZ
Spokane
DICK KUBE
Warden
STEVE CONNORS
JERRY KINKADE
ART PRIOR
Wenatchee
HU BLONK
Wilson Creek
GLADYS BECKER
*Treasurer

April 4, 1986

TESTIMONY TO

ENERGY AND WATER SUBCOMMITTEE OF APPROPRIATIONS

HOUSE OF REPRESENTATIVES

HONORABLE TOM BEVILL, CHAIRMAN

SCOPE OF TESTIMONY

SUPPORT THE FY 1987 BUDGET, DEPARTMENT OF THE INTERIOR

FOR THE UNITED STATES BUREAU OF RECLAMATION

FOR THE COLUMBIA BASIN PROJECT

$31,000,000

ORAL WITNESS

RUSSELL WENTWORTH

WRITTEN TESTIMONY

FOR THE

COLUMBIA BASIN DEVELOPMENT LEAGUE

EAST COLUMBIA BASIN IRRIGATION DISTRICT

QUINCY-COLUMBIA BASIN IRRIGATION DISTRICT

SOUTH COLUMBIA BASIN IRRIGATION DISTRICT

This testimony supports the Department of the Interior program for the Bureau of Reclamation on the Columbia Basin Project in Washington State. The support that this committee has given to the energy and irrigation development in the Columbia Basin Project over the years is recognized and appreciated. It is development of Projects such as these that has created an economic stability in many areas throughout the United States where otherwise there would have been no real base for many communities.

Wise use of our natural resources to create the basic wealth necessary for further economic growth is essential. This committee has long recognized that need, and the role that was necessary for the Federal Government to take in the development of those resources.

The 1987 Budget as presented is modest but will accomplish the necessary items that need to be taken care of. Over three-fourths of the budget is for riverbank stabilization and switchyard work that needs to be done for final completion of the third powerhouse at Grand Coulee Dam. The balance of the budget is spread over many small items from the construction of Wahatis Wasteway which completes the first half of the irrigated area; to the Environmental Impact Statement that will take a look at completion of the second half of the 1,095,000 acre Project that was authorized in 1935 by Congress.

We ask for your support and approval of the Columbia Basin Project FY 1987 budget as presented.

Thank you.

Sincerely

Chan Bailey

Chan Bailey
Executive Secretary

EAST COLUMBIA BASIN IRRIGATION DISTRICT

P. O. Box E OTHELLO, WASHINGTON 99344 Phone 488-9671

April 8, 1986

The Honorable Tom Bevill, Chairman
Subcommittee on Water and Energy Development
2362 Rayburn Office Building
Washington, D.C. 20515

Dear Congressman Bevill:

The East Columbia Basin Irrigation District supports the President's budget for the Columbia Basin Project for fiscal year 1987.

The budget provides for the completion of work on the Wahatis Wasteway which was begun in fiscal year 1986. This wasteway is an important safety valve on the Wahluke Branch Canal. Completion of this wasteway will help protect previous investments in this canal system and project farmlands.

We strongly support the completion of the Environmental Impact Study for the Second Half of the Columbia Basin Project which was begun by the Bureau of Reclamation in fiscal year 1986. Declining groundwater levels and other factors indicate a future need for additional water supplies for lands located east of the existing project. Completion of the EIS will provide valuable information for federal, state and local decision makers dealing with these needs. The State of Washington continues to assist the Bureau of Reclamation in this information gathering process. The state funded "Preliminary Socioeconomic Analysis for the Second Half of the Project" study will become a portion of the EIS document. The 1986 session of the State Legislature passed legislation reaffirming the state's concern over providing adequate future water supplies and also authorizing further studies of the Second Half of the Project by the State Department of Agriculture.

The President's budget provides for additional drainage construction at a level similar to recent years. Some additional drainage facilities in the East District continue to be necessary to protect project farmlands.

Sincerely,

C Earl Terwilleger

C. Earl Terwilleger
Director

RLE:rp

QUINCY-COLUMBIA BASIN IRRIGATION DISTRICT
TELEPHONE 787-2316 • POST OFFICE BOX 188
QUINCY, WASHINGTON 98848

April 4, 1986

The Honorable Congressman Tom Bevill, Chairman
Subcommittee on Energy and Water Development
2362 Rayburn House Office Building
Washington, D. C. 20515

Dear Mr. Chairman and Members of the Subcommittee:

In re: Fiscal Year 1987 Budget Request
for Columbia Basin Project

As President of the Board of Directors of the Quincy-Columbia Basin Irrigation District, one of the three districts comprising the Columbia Basin Project, I have been requested to present to your Committee the comments of the Quincy District relating to the proposed Budget for the Fiscal Year 1987 for the Columbia Basin Project.

The Quincy District is most pleased to note the amounts included in the proposed Budget for drainage construction and deferred and supplemental construction. These expenditures are most vital to the lands within the Project and also very important to further secure the investment of the United States in and to the irrigation facilities of the Project. These expenditures are absolutely necessary for the continued success of the Project and the enhancement of the ability of the waterusers to repay their repayment obligation to the United States.

The Quincy District is also appreciative of the amounts proposed in the Budget to study the feasibility of the completion of the second half of the Columbia Basin Project. While the District realizes that expenditures for the construction of irrigation facilities to serve additional lands cannot be anticipated in the immediate future in view of the need for fiscal constraint, we feel that it is most important that the study of the feasibility for the completion is most imperative for contemplated long-term development.

The Directors of the Quincy District respectfully request your support in approving the requested appropriations in the President's Budget for the Fiscal Year 1986 for the Columbia Basin Project.

Sincerely,

QUINCY-COLUMBIA BASIN IRRIGATION DISTRICT

By Russ Wentworth
Russell Wentworth, President of the
Board of Directors of the Quincy-
Columbia Basin Irrigation District

"The Green Spot of the Columbia Basin"

South Columbia Basin Irrigation District

OFFICE: 402 WEST LEWIS STREET

TELEPHONE 547-1735 • P. O. BOX 1006 • PASCO, WASHINGTON 99301

March 27, 1986

The Honorable Tom Bevill, Chairman
Subcommittee on Water and Energy Development
2362 Rayburn Office Building
Washington, D.C. 20515

Dear Congressman Bevill:

On behalf of the Board of Directors of the South Columbia Basin Irrigation District, I am pleased to inform you and your committee members that we support the President's Budget as it relates to energy and irrigation development on the Columbia Basin Project for F.Y. 1987. We particularly support those items budgeted for:

a) Drainage Construction;
b) Deferred and Supplemental Construction;
c) East High Canal Irrigation System;
d) East Low Extension; and
e) Deferred and Bypassed Lands.

The Deferred and Supplemental Construction program provides for completion of work on the Wahatis Wasteway which will be a "valued" operational safety valve for the Wahluke Branch Canal system. The Wahluke Branch Canal conveys water to 48,800 acres downstream from the proposed wasteway diversion structure location.

Also, the program will allow for timely completion of the Environmental Impact Statement for continued Project development. We look forward to the ultimate completion of the 1,095,000-acre Columbia Basin Project as originally authorized and reauthorized by Congress on August 30, 1935--fifty years ago.

Very truly yours,

Merle R. Gibbens

Merle R. Gibbens, Secretary-Manager
Irrigation & Drainage Division

MRG:kk

COLUMBIA BASIN PROJECT DELEGATION

April 14 - 16, 1986 Washington, D.C.

Reid Phillips, P.O. Box 512, Lind, WA 99341
President, Columbia Basin Development League
Farmer in undeveloped portion of the Project

Earl Terwilleger, P.O. Box 96, Warden, WA 98857
Director, East Columbia Basin Irrigation District
Project farmer.

Doyle Mathews, 11282 Taylor Flats Rd., Pasco, WA 99301
Director, South Columbia Basin Irrigation District
Project Farmer.

Paul Olberding 12060 Coyan Rd., Connell, WA 99326
Director, South Columbia Basin Irrigation District
Project Farmer

Russell Wentworth, Route 1, 404-4, Ephrata, WA 98823
Director, Quincy-Columbia Basin Irrigation District
Project Farmer

Chan Bailey, P.O. Box 715, Othello, WA 99344
Development Director, Columbia Basin Project Irrigation Districts
Executive Secretary, Columbia Basin Development League.

Mr. **Bevill**. Thank you.

Mr. **Morrison**. This reflects the good work done by the subcommittee in previous years in that the projects of greatest interest have been included in the past and are ongoing, and seem to be supported by the Administration.

Mr. **Bevill**. We will certainly continue working with you on this. We appreciate each of you appearing here today, and we will do the best we can to help you.

Mr. **Morrison**. Thank you.

Tuesday, April 15, 1986.

PACIFIC NORTHWEST PROJECTS

WITNESS

PEGGY BIRD, EXECUTIVE DIRECTOR, PACIFIC NORTHWEST WATERWAYS ASSOCIATION

Mr. **Bevill**. Ms. Peggy Bird.

Ms. **Bird**. Mr. Chairman, I appreciate very much this opportunity to take a few minutes of your time to briefly highlight what I have handed in as a written statement. I won't read the entire statement.

I am Peggy Bird, Executive Director of the Pacific Northwest Waterways Association, a five-state regional association of Alaska, Idaho, Montana, Oregon and Washington. I come before you to do a couple things, first of all to support the Corps of Engineers 1987 budget as submitted, particularly with respect to projects that you have been very good to us with and that we have been following as high priorities for a long time, the Bonneville lock on the Columbia River and the Mt. St. Helens single retention structure to help us keep the channel clear.

You are very well aware of those projects. We want to express our gratitude to the committee and the Congress for getting those projects authorized and appropriated for.

We would like to support the 1987 budget proposal for the Bureau of Reclamation. You heard from Congressman Morrison and the Irrigation District about the Columbia River Basin Project which we also support, and the Yakima Basin Enhancement Project. There are a few other specifics I would call to your attention in the budget.

There are two $150,000 reconnaissance studies, one for the Port of Olympia and the other for Bellingham to do recon studies on extension of some Federal dredging projects there. We would also, in my testimony, request you to look at giving to the Corps an additional amount of money in their new studies area.

As you are aware, I am sure, the Pacific Northwest has lagged behind the rest of the nation in its economic recovery. We are concerned that the lack of those new starts and projects will hinder our economic recovery in the future.

Again, I appreciate your giving us this time to present this to you, and thank you very much.

Mr. **Bevill**. Thank you very much for a very fine statement.

[The statement of Ms. Bird follows:]

TESTIMONY ON BEHALF OF
THE PACIFIC NORTHWEST WATERWAYS ASSOCIATION

BY

PEGGY BIRD, EXECUTIVE DIRECTOR

TO

THE HOUSE COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

THE HONORABLE TOM BEVILL, CHAIRMAN

APRIL 15, 1986

Pacific Northwest Waterways Association
P. O. Box 61473
Vancouver, Washington 98666
(206) 699-4666

Mr. Chairman, members of the committee, my name is Peggy Bird. I am the Executive Director of the Pacific Northwest Waterways Association. On behalf of the members of the Association, I'd like to thank you for this opportunity to present our testimony to you today.

PNWA is a regional association with membership in five states--Alaska, Idaho, Montana, Oregon and Washington. For 52 years we have supported the planning for and the appropriate development of water resources in our region for transportation and navigation, flood control, power generation, agriculture and irrigation, commerce and trade, recreation and fisheries--a multiple use concept that balances the interdependent uses of our waterways resources.

I am here today to do five things:

1. To support the FY '87 budget proposal for the North Pacific Division, U. S. Army Corps of Engineers,

2. To express our appreciation for your efforts to fund the replacement of the navigation lock at Bonneville Dam and the sediment retention structure on Mt. St. Helens and to urge continued support for these two very important regional projects,

3. To support the FY '87 budget proposal for the Bureau of Reclamation's Pacific Northwest Region,

4. To convey our thanks for your efforts to fund the Yakima River Basin Enhancement Project and the studies for the second half of the Columbia Basin Irrigation Project in Washington state, and to urge your continued support for those projects,

5. To request your consideration of additions to the Corps of Engineers' budget for such projects as the Columbia River and Tributaries (CR&T) study (which is a continuing project) and a new start for a reconnaissance study of the Coos Bay, Oregon deep draft navigation channel.

As we have done in the past, PNWA supports the Corps of Engineers' budget for FY '87. The $262.6 million request, although it maintains O&M and on-going studies and construction projects on schedule, is $28 million less than the North Pacific Division's FY '86 budget. The budget categories for reconnaissance studies, continuation of planning and engineering (CP&E) and advance engineering and design (AE&D) have all been reduced for FY '87. As you may know, the economic recovery of the

Pacific Northwest has lagged that of the rest of the country. And recent oil price drops have hit Alaska particularly hard. The lack of new study, CP&E and AE&D starts will, we believe, have a negative impact on the future economic development and growth in our region.

On a positive note, we very much appreciate the Congress' action to add monies for the Bonneville navigation lock and the sediment retention structure on Mt. St. Helens to the 1985 Supplemental Appropriation. The upgrade of the Bonneville lock has been one of PNWA's top priority issues for some time. The lock is the oldest and the smallest on the Columbia/Snake River System and has been a bottleneck for barges transiting the river. With on-going appropriations for the replacement of the lock, the Corps of Engineers can proceed on schedule so that the lock will be upgraded to meet increases in shipping on the system, heading off congestion of grid-lock proportion.

We support the FY '87 appropriation for $20 million (50% from the general fund, 50% from the Inland Waterways Trust Fund) to continue this urgently needed project.

Another high priority for PNWA is the construction of the sediment retention structure (SRS) on Mt. St. Helens. As you know, the 1980 eruption of the Mt. St. Helens volcano has cost millions of dollars a year in dredging to keep the Columbia River navigation channel open and to reduce the threat of flooding in Southwest Washington state. We urge your continued support of funds for this temporary measure (budgeted this year at $10 million) until the permanent solution--the sediment retention structure--can be constructed. Although we are fortunate that unusually low water years in the region have spared us major flood damages, we are most concerned that the appropriation of funds continue in a timely manner so that the Corps can proceed with the SRS project to avoid catastrophic flooding. This project will not only eliminate the threat of flooding but will save millions of dollars over the years in appropriations for channel dredging.

We also support the Bureau of Reclamation's proposed budget for FY '87. Two projects are of particular interest to PNWA--the Yakima River Basin Enhancement Project and the studie for the completion of the Columbia Basin Project.

The Yakima Basin Project appropriation for $12 plus millio for FY '87 will complete fishway and/or screen structures at five irrigation diversion dams and begin preconstruction or contract awards for five others. The appropriation for the Columbia Basin Project includes monies for the completion of the EIS on the second half of the project.

Finally, we would request your consideration of additional funds for the North Pacific Division, Corps of Engineers for studies and projects for which the Division has approved capabilities. We would request an additional $1,821,000 for those studies (outlined more completely in the Appendix to my testimony). I call your particular attention to the Columbia River and Tributaries and Coos Bay studies.

The continuation of the CR&T study is included in the FY '87 budget at $1.8 million. The study, which is investigating potential programs and projects to develop additional water storage in the Columbia Basin, will continue to look at needed water storage this year on three rivers and at navigation on the middle Columbia. An additional $50,000 could be used to study flood control on the lower Columbia where flood-prone areas exist with weak or inadequate levees. That small addition would advance those much-needed studies by six months. PNWA supports the additional $50,000.

The second study I would call to your attention is not included in the FY '87 budget. We would request, therefore, the addition of $250,000 for a new study start of the Coos Bay deep-draft navigation study. Coos Bay, on the southern Oregon coast, has been most hard hit by the down turn in the timber industry. However, the port has worked very hard to diversify and increase shipping. Their success is limited by constriction of the existing Federal deep-draft channel and a narrow railroad bridge. PNWA supports funding for the recon study for Coos Bay and urges the additional appropriation of $250,000 by the Congress.

Again, Mr. Chairman and members of the committee, I very much appreciate this opportunity to present PNWA's views to you. If I can answer any questions or provide additional information to you, I would be glad to do so.

U.S. ARMY CORPS OF ENGINEERS
APPENDIX I
TO
PACIFIC NORTHWEST WATERWAYS ASSOCIATION
TESTIMONY TO
SUBCOMMITTEE ON ENERGY & WATER DEVELOPMENT
OF THE COMMITTEE ON APPROPRIATIONS

APRIL 15, 1986

Pacific Northwest Waterways Association
P. O. Box 61473
Vancouver, Washington 98666
(206) 699-4666

U.S. ARMY CORPS OF ENGINEERS 01 April 1986

BUDGET COMPARISONS

The Corps FY 1987 budget request to Congress totals $262,608,000 to continue activities in the Pacific Northwest and Alaska. The following budget comparisons for programs in the Pacific Northwest and Alaska have been furnished to us by the Corps.

Appropriation Category	FY 1986 Allocations	FY 1987 Program	Change From FY 1986 To FY 1987
GI-Studies	$ 6,888,000	$ 5,999,000	$ -889,000
GI-CP&E/AE&D	4,531,000	2,067,000	-2,464,000
Const., General	125,121,000	99,300,000	-25,821,000
O&M, General	154,000,000	155,242,000	+1,242,000
Totals	$290,540,000	$262,608,000	$-27,932,000

The total budget request for FY 1987 is about $28 million less than the amount allocated for FY 1986.

IMPACT OF BUDGET PROGRAM

PNWA is pleased that the funding levels that are budgeted are adequate to maintain schedules at ongoing studies and construction projects. However, PNWA is disturbed by the lower level of funding for certain other appropriation categories and the absence of funding for other specific projects. These will be discussed in the following sections.

FISCAL YEAR 1986 PROGRAM

PNWA is appreciative of the foresight of the Congress in adding additional funds in FY 1986 for one study, one construction project, and five O&M projects, all in the North Pacific Division. We also appreciate the addition of the Bonneville Navigation Lock and the Elk Creek Lake to the Fiscal Year 1985 Supplemental Appropriations which funds are included in the Corps FY 86 Program. The authorization for construction of the sediment retention structure at Mt. St. Helens is a major step towards relieving the significant flooding and navigation problems downstream of the mud flows from the eruption in May 1980.

NEW STARTS

PNWA believes that new study, CP&E and AE&D starts involving hydroelectric power, navigation and flood control should rank high in the budget program for the Corps and other Federal agencies and is encouraged by the two new study starts, one CP&E new start and one construction new start recommended for FY 1987. The PNWA was disappointed by the absence of any new study, continuation of planning and engineering, and advance engineering and design starts in the budget request for the Corps of Engineers program in the Pacific Northwest and Alaska for FY 1986. The restrictions on new study, CP&E, and AE&D starts combined with constrained funding levels of these programs will have a serious impact on the future economic growth and welfare in this region. We feel strongly that the level of funding of this important program will have a significant impact on the immediate employment, energy, and water supply of the region. We feel the Corps should continue to be funded for new starts in FY 1987 and beyond and fully support the recommended New Starts in the FY 87 program.

SMALL PROJECTS PROGRAM

We note that the President's budget for FY 1987 for the Small Projects Program of the Corps of Engineers has decreased slightly over the preceding years. Under this program, the Corps is able to respond quickly and efficiently on projects where the Federal cost is less than $2 million for Section 107 navigation projects and less than $4 million for Section 205 small flood control projects. This program permits the Corps to meet small, but urgent navigation and flood control needs and to cooperate with local interests in needed public works. We encourage continued budgetary support for this program.

WATER SITUATION IN THE PACIFIC NORTHWEST

PNWA is encouraged that current forecasts show a near normal year for water supplies in the Pacific Northwest. The water supply forecast is slightly below the 20 year average. January was below average but February turned around and was much above normal therefore bringing an earlier below normal forecast up to be a near normal forecast.

Reservoirs have been lowered in preparation for the annual spring snowmelt. Surplus energy has been and is continuing to be marketed outside the region. Looking ahead to this spring and summer, the current water supply forecast based upon basin snowpack measurements indicate a slightly below normal runoff in most areas. However, there appears to be sufficient water to meet reservoir operational requirements and minimize conflicts over competing usage. Marketing of energy outside the Northwest will probably be reduced this spring and summer due to spilling water for fishery operations called for by the Northwest Power Planning Council's Fish and Wildlife Program.

We appreciate the way the Corps manages the critical issues on the use of water resources in the Northwest. There is a lot of planning and negotiations that are required to permit the best use of these resources and the Corps has a good handle on how to make the allocations work to the best interest of all parties. The Congress has wisdom in providing the Corps the funds necessary to operate this very complex system and PNWA appreciates that and requests that funding be continued.

Bellingham Harbor, Washington

Bellingham, Washington is a port city of 46,000 people located on the northeastern shore of Puget Sound. The Port of Bellingham handles about 2 million tons of commerce annually, including log shipments and ore and mineral imports, through four existing Federal navigation projects in Bellingham Harbor. The Port has requested a Federal study of deepening Whatcom Creek Waterway to accommodate the larger vessels now serving Pacific Rim operations. A deeper channel would result in increased commodity movements since vessels would not experience the current tidal delays. Despite delays, vessel traffic in 1982 increased by 25 percent over the previous 10 years. Vessel drafts are expected to increase to 39 feet in the future. This will cause vessels to light load or experience additional delays.

We understand that Fiscal Year 1987 funds in the amount of $150,000 are being requested to initiate and complete a reconnaissance phase study to determine the Federal interest in deepening Whatcom Creek Waterway, including the need for any navigation improvements in other areas of the harbor as well. PNWA supports the Port of Bellingham request and strongly urges approval of the requested funds.

Homer Spit Erosion, Alaska

Homer Spit is located on Cook Inlet at the Mouth of Kechemak Bay and about 120 miles southwest of Anchorage. The economic base for the City of Homer depends on numerous facilities located on the spit, such as a 50-acre ($14 million) small boat harbor completed in 1984, a thriving deep-water port, commercial fish processing plants and fuel storage tanks. The spit is exposed to a severe wave climate and the state highway connecting the town on the mainland to these facilities has been severed on several occasions during storms. Since 1966 the state has expended more than $6 million for repairs to protect the highway. These efforts have only had limited success. The Corps study is addressing the coastal hydraulic processes affecting Homer Spit and long-term solutions to the erosion problems. Following completion of an agreement with the State of Alaska to share costs for this effort, FY 1986 funds will be used to initiate the feasibility phase of study. In FY 1987, funds will be used to complete the Federal share of the feasibility phase of study including preparation of a Definite Project Report.

The PNWA supports FY 1987 funds in the amount of $297,000 to complete feasibility studies addressing the serious erosion problems affecting the economic livelihood of the City of Homer, Alaska.

Olympia Harbor, Washington

Olympia Harbor, Washington is located on the southern shore of Puget Sound with port facilities presently handling about 1 million tons of commerce annually, mostly timber products shipped to Pacific Rim nations. The harbor is divided by a port-constructed peninsula into East Bay and West Bay. A Federal channel was dredged in West Bay to 500 feet wide by 30 feet deep in 1939. The port is actively expanding and diversifying its trade; however, existing and future waterborne commerce is limited by inadequate channel dimensions for the world fleet of vessels which call on the Port of Olympia. The port has requested a Federal study to determine the need for channel and turning basin deepening in West Bay, including the need for any other improvements to address navigation problems affecting the harbor.

We understand that $150,000 Fiscal Year 1987 funds are being requested to initiate and complete the reconnaissance phase of study to determine the need for Federal navigation improvements at Olympia Harbor. PNWA supports the Port of Olympia's study request and strongly urge your approval of the needed funds.

Rivers and Harbors in Alaska

The State of Alaska is experiencing an economic slowdown due to declining oil revenues; however, this situation is expected to be short term. Vast physical and economic changes are anticipated in the future based increasingly on the development and use of its natural resources. For example, growth in mineral exploration and extraction, diversification of the fishing industry to harvest bottomfish, and changed timber harvesting practice has accelerated need for navigation improvements.

The Rivers and Harbors in Alaska study is addressing current and potential future water resource problems and needs. In FY 1986 funds are being used to complete detailed feasibility studies for harbor and channel improvements at Akutan/Unalaska and King Cove Harbor to support development of an American bottom fishing industry. An interim study of shallow-draft navigation on the Yukon-Kuskokwim River system will be completed. Investigations of harbors to serve the Bristol Bay fishing industry and harbor improvements necessary to support the growing coastal oil and gas industry are being continued. FY 1986 funds are also being used to resume studies for communities experiencing coastal erosion problems and to identify harbors of refuge in southeast Alaska. FY 1987 funds will be used to continue work on harbor improvements for Bristol Bay, navigation improvements at coastal ports expected to serve oil and gas exploration, coastal erosion studies, and for the southeast harbors of refuge. In addition, funds will permit resumption of comprehensive studies of harbor improvements needed for development of mineral resources and to transmit general cargo to the interior of Alaska via new or existing ports in western Alaska. The PNWA strongly supports FY 1987 funds in the amount of $946,000 to continue and resume these comprehensive studies.

Bonneville Navigation Lock, Oregon and Washington

This proposed project consists of a new navigation lock at Bonneville Dam on the Oregon shore, south of the existing lock and powerhouse. The new lock chamber would have horizontal dimensions of 86 feet wide by 675 feet long, thereby matching the dimensions of the seven other locks on the Columbia-Snake River Navigation System. The new lock would accommodate vessels with a 14 foot draft.

Operation of the new navigation lock would eliminate delays and result in faster, more efficient movement of tows and barges through the Bonneville Project. Approach channel modifications would add a measure of safety for barge tows approaching the new lock. The Columbia-Snake River Navigation System could then be utilized to its full potential.

Initial funds for construction were appropriated in FY 1985, as part of the Supplemental Appropriation Act of 1985, Public Law 99-88. PNWA supports the program of $20,000,000 for FY 1987 to continue construction of this urgently needed improvement to the Columbia-Snake navigation system. These funds are to be derived by 50% from general appropriations and 50% from the Inland Waterways Trust Fund. We also encourage the Corps to complete this project by 1992 as currently scheduled.

Chief Joseph Additional Units

At Chief Joseph Dam on the Columbia River just upstream of Bridgeport, Washington, construction of an additional 11 hydraulic-turbine/generator units was essentially completed in 1979. However, the hydraulic-turbines for these units failed to meet the operating efficiency required by the contract and guaranteed by the manufacturer. In attempting to settle this issue the Corps directed the contractor to correct the deficiency. The contractor has offered a monetary settlement of $2.5 million which is considerably less than the cost of correcting the deficiency. This matter has not been resolved. Meanwhile, the power lost due to this inefficiency at the Chief Joseph project must be replaced in the power system by considerably more expensive thermally generated power, resulting in an estimated economic loss to the region of $6.5 million annually, or a present value of $75 million over the operating life of the units. The Corps indicated that correction of the deficiency is estimated to cost more than $25 million, and has a benefit/cost ratio of approximately 2.5 to 1.

PNWA understands that when a contractor refuses to comply with the contract provisions, the Government's contractual remedy is to have others perform the required work and bill its cost to the non-complying contractor when other settlement options are not adequate. This action would move the

Government's dispute with the contractor past the present deadlock as well as eliminating the $6.5 million annual economic loss to the region. In order for the Corps to pursue this course of action, funding is necessary.

We encourage Congress to support a program which will correct the Chief Joseph turbine performance deficiencies and request that adequate funds be provided to the Corps to perform that work.

MT. ST. HELENS

PNWA thanks Congress for continuing the funding necessary to provide flood protection along Cowlitz River and construction of the Spirit Lake permanent outlet. We are pleased that the Corps of Engineers completed construction of the Spirit Lake Tunnel as scheduled in April 1985. Drawdown of the lake to its safe operating level was completed in September 1985, and the tunnel is now fully functional.

Continuation of funding will be necessary to provide 100-year flood protection to developed areas along the Cowlitz and Toutle Rivers until such time as a permanent solution is provided, as authorized by the Supplemental Appropriations Act of 1983, PL 98-63. $10 million has been programmed for FY 1987 for providing this temporary emergency flood protection. Thus, we urge the Congress to include $10,000,000 in the FY 1987 appropriations as programmed by the Corps.

Since the major emergency restoration work was completed in 1981, the Corps of Engineers has spent an average of $30 million each year to provide marginal flood protection along the Cowlitz River. We have been spared major flood damages only because of unusually low water years in this area. We must expedite a permanent solution and avoid spending millions of tax dollars on dredging, and depending on temporary levees for flood protection which never really solves the fundamental problem.

We are pleased with the progress made in the past year toward implementation of a solution to the longer range sediment control problem associated with Mt. St. Helens. We commend Congress for authorizing construction of a single sediment retention structure at the Green River Site in accordance with the recommendations of the Corps feasibility report. Congress should follow this action with appropriation of the funds necessary to begin construction of the sediment retention structure. The Corps has programmed $17,000,000 to begin construction in FY 1987. We urge the Congress to include this amount in the FY 1987 budget. We also encourage the Congress to authorize the Corps to proceed with initial construction of this urgently needed project in FY 1986 with $1.4 million to be made available from previously appropriated funds. This will allow the Corps to proceed with site clearing and associated access road as well as dewatering work at the site.

Downstream Migration of Columbia and Snake River Fish Runs

The fishing industry which results from the fish runs in the Columbia and Snake River systems is critical to the economy of the Pacific Northwest. Assuring that fingerling fish can safely pass through or around the Columbia and Snake River dams on their downstream migration to the Pacific Ocean is essential to continuation of the fish runs in the Pacific Northwest.

In recent years it was demonstrated that a substantial percentage of downstream migrant fish are being killed as a result of passing through the power generating units at many of the large power projects on the Snake and Columbia Rivers. Increasing the efficiency of guiding downstream migrants away from the power units and into special downstream migrant bypass systems is critical to reducing these fish kills.

We thank the Congress for providing the resources for the Corps to construct downstream bypass facilities, and to continue research efforts to determine the best and most economical permanent solutions to this serious problem. With available funds the Corps plans to continue this work in FY 1987 at John Day, Bonneville, The Dalles, and the Snake River Projects.

The work at John Day includes the completion of a downstream migrant bypass system in time for the 1986 downstream fish runs, with the balance of the work being complete before April 1987 in time for the 1987 fish runs. This work was funded by Congress under Construction, General funding, and is also planned to be completed with available funding. We encourage the Corps to continue this vital work as expeditiously as possible.

With additional funds provided by the Congress in FY 1986, the Corps is proceeding with studies, testing and evaluation of various methods to increase the bypass efficiencies at the four Snake River projects and at The Dalles. We appreciate the Congress providing these funds and encourage the Corps to continue these investigations.

ADDITIONAL CAPABILITIES

At our request, the Corps has furnished a list of studies and projects for which it has reported capabilities to use additional funds above the FY 1987 budget amounts, subject to their usual qualifications. PNWA screened the many worthwhile studies and projects included in the programs for which the Corps is responsible and carefully studied the capabilities and are recommending those which we consider paramount to fulfilling PNWA's goals for water and related land resource development of this region. Of the studies and projects in which the Corps has reported additional approved capabilities along with some other Corps projects, we are specifically recommending increases to five studies and projects. These are summarized by category below.

Appropriation	PNWA's Recommended Increases to the FY 1987 Budget Request	Study/Project
General Investigations Studies	$ 50,000	Columbia River & Tributaries
	250,000	Coos Bay
TOTAL G.I.	300,000	
Construction, General	$ 1,500,000	Lower Snake River Fish & Wildlife Compensation Plan
Operation & Maintenance	$ 348,000	Ice Harbor - Powerhouse Modernization
	1,473,000	John Day Powerhouse (Major Rehabilitation)
TOTAL O&M	$ 1,821,000	

STATEMENTS IN SUPPORT
OF
ADDITIONAL FUNDING FOR FY 1987

GENERAL INVESTIGATIONS - CONTINUING STUDIES

Columbia River and Tributaries, ID, MT, OR, and WA

FY 1987 Budget Amount	$ 1,809,000
Additional Recommended for FY 1987	$ 50,000

Residents of the Pacific Northwest are greatly dependent upon the Columbia River for its power, food and fiber through irrigation, transportation through navigation, recreation. fisheries, and to a lesser extent, municipal and industrial water supply. These uses are often in conflict, demonstrating that supplies of water are not adequate to meet all of the growing demands placed upon the Columbia River. No other single resource in the Pacific Northwest influences the character and way of life in the region as much as the Columbia River and its major tributaries.

The development of additional storage in the basin could help to meet the growing demand for additional water supplies. The Columbia River and Tributaries Study is investigating a number of potential projects and programs to supplement the existing system while also formulating an overall system plan to insure that the Columbia River and its tributaries will be operated and managed in an optimum manner and in the public's best interest.

In FY 1986 funds are being used to continue studies of water storage projects in the Similkameen and Clearwater River basins, navigation in the middle Columbia River, and flood control needs along the lower Columbia River.

It is our understanding that funds proposed in the President's FY 1987 budget request would be used to continue studies of needed water storage projects in the Columbia River Basin on the Similkameen, St. Joe, and Clearwater Rivers, and of navigation on the middle Columbia River. Also, it is our further understanding that numerous flood prone areas exist along the lower Columbia River which have weak and inadequate locally-constructed levees. Additional funds in the amount of $50,000 could be used to accelerate flood control studies of those areas.

PNWA supports continuation of the Columbia River and Tributaries Study and strongly urges that the proposed budget of $1,809,000 be approved and that funds in the amount of $50,000 be added to the FY 1987 budget request for the Columbia River and Tributaries Study to advance completion of the levee studies on the lower Columbia River by six months.

GENERAL INVESTIGATIONS - NEW STUDY START

Coos Bay, Oregon

FY 1987 Budget Amount	$ 0
Amount Recommended for FY 1987	$ 250,000

The Coos Bay deep-draft navigation channel, serving southwest Oregon, is a vital transportation link between domestic producers and foreign markets. The continuing export of forest products and other products helps balance our international trade deficit and provide employment opportunities to the area which is currently experiencing nearly twice the national unemployment rate. An existing Federal deep draft navigation project at Coos Bay serves the needs of the people in six Oregon counties including seven major cities. However, the existing channel is constricted and vessels must pass through a narrow railroad bridge. With increased water traffic and larger vessels, costly delays are being experienced which result in higher ocean freight costs. The PNWA supports the Coos Bay, Oregon navigation improvement study and strongly urges that funds in the amount of $250,000 be added to the FY 1987 budget request to initiate and complete the reconnaissance phase for this important study.

CONSTRUCTION, GENERAL

Lower Snake River Fish and Wildlife Compensation Plan, WA, ID, & OR

FY 1987 Budget Amount	$14,000,000
Additional Recommended For FY 1987	$ 1,500,000

The Lower Snake River Fish and Wildlife project will provide compensation for the losses to the fish and wildlife resources that were caused by the construction and operation of the four Lower Snake River dam projects (Ice Harbor, Lower Monumental, Little Goose and Lower Granite). The project consists of a number of Chinook and Steelhead hatcheries that will provide 27,000,000 juvenile salmon and steelhead. These fish will be released in streams for migration to the Pacific Ocean. Adult salmon and steelhead resulting from these releases will provide both sport and commercial fishing opportunities with over 4 million pounds of fish going to the commercial fisheries and approximately 689,000 additional angler days of sport fishing. An estimated 132,000 adult fish will return to the project area of the Snake River. In addition to the anadromous fish, 93,000 pounds of trout or equivalent sports fishing will be reared and released in Eastern Washington and Idaho streams which will provide 45,000 additional angler days of sport fishing.

The Corps is progressing well on this project and expects to complete all hatchery construction by September 1989. The Clearwater Hatchery is currently scheduled to start construction in October 1987. A statellite hatchery at Powell, to be a part of the Clearwater, is scheduled to start at the same time. However, if additional funds of $1.5 million were provided in FY 1987, this facility could start in April and would provide the needed lead time to complete the facility for utilization by the Clearwater Hatchery. The PNWA supports the need for these additional funds and requests the Congress to appropriate them in FY 1987.

In addition to a system of fish propagation facilities, the compensation plan also provides for the acquisition of appropriate estates in lands for habitat development, and fisherman and hunter access on a willing seller-willing buyer basis. To date, the Corps has found that landowners in the project area are generally unwilling to grant land easements, as authorized, for wildlife and public access purposes. Their objections were based on the fact that such easements would adversely encumber their property should they desire to sell it at some future date. A number of owners were willing to sell their lands outright, however. The Corps has a Special Report which recommends actions to facilitate the accomplishment of the Compensation Plan. The primary recommendation is to allow the acquisition criteria to be modified to permit fee acquisition of whole farm units.

On November 13, 1985, the House of Representatives passed H.R. 6 which contained language, independently included, to authorize the changes in the Lower Snake River Fish and Wildlife Compensation Plan recommended in the Corps of Engineers Special Report. Such language is not included in the Senate companion bill, S-1567.

In summary, the Corps will be unable to make any substantial progress in achieving the wildlife mitigation objectives of the Lower Snake River Fish and Wildlife Compensation Plan until authority to accomplish the additional acquisition criteria is provided by Congress. The PNWA actively urges Congress to authorize the Corps to permit fee acquisition for the purchase of all the necessary lands to complete the wildlife portion of the project.

OPERATION AND MAINTENANCE

Ice Harbor - Powerhouse Modernization

FY 1987 Budget Amount	$389,000 1/
Additional Recommended For FY 1987	$348,000

1/ (This amount is part of the Ice Harbor Lock & Dam, WA project's FY 87 Request of $5,822,000)

The original three turbine units at the Ice Harbor project on the Snake River are identical in design to the John Day turbine units, and have suffered from some of the same mechanical problems.

We applaud Congress and the Corps for embarking on a modernization program to repair the turbine units and to modernize other aging equipment so that plant generating unit availability will not decline to a level that would adversely affect efficient operation of the NW power system. We encourage Congress to continue support of this modernization work through its completion in 1992. We also ask that additional funds in the amount of $348,000 be included in the FY 1987 appropriation for the Ice Harbor project to implement the powerhouse fire protection work and to replace the governors for power units 1, 2, and 3.

Also, at the Ice Harbor project, we wish to thank Congress for funding the dredging work at the downstream entrance to the navigation lock. This work, which the Corps will complete this month will eliminate river currents that cause difficult navigation conditions for the river transportation industry.

OPERATION AND MAINTENANCE

John Day Powerhouse (Major Rehabilitation)

FY 1987 Budget Amount	$3,900,000 1/
Additional Recommended For FY 1987	$1,473,000

1/ (This amount is part of the John Day Lock & Dam, OR & WA projects FY 87 Request of $11,855,000)

Because of its large capacity, relative freedom from operation constraints, and strategic location with respect to load centers, transmission lines and to other major hydroelectric projects; John Day is a key project in the control of the regional power system.

Operation of the plant for power peaking as well as for balancing regional power load variations has caused frequent generation unit loading and unloading which has taxed the turbines and generators in excess of their original design capability. In recent years this has caused excessive mechanical and electrical failures and reduced unit availability considerably below a reasonable level. Without the major rehabilitation effort presently underway, this decrease in powerplant availability would have continued and would have caused major problems in operation of the NW power system over the next few years.

We thank the Congress and the Corps for undertaking the major rehabilitation program at the John Day project to refurbish the turbine and generating equipment to head-off further declines in unit availability and restore the powerhouse to a condition suitable to support the key role it must play in the NW power system. We encourage Congress to continue support of this vital work through the program's completion in FY 1991 and ask that funds in the amount of $1,473,000 be added to the FY 87 budget request. These additional funds will be utilized to install a fire protection system in the powerhouse as well as install corrosion protection for the intake gates and bulkheads.

DEPARTMENT OF THE ARMY 01 Apr 86
NORTH PACIFIC DIVISION, CORPS OF ENGINEERS
Program for Fiscal Year 1987

Study	Type of Study 1/	FY 1987 Budget Request	Additional Capability
GENERAL INVESTIGATIONS			
Studies			
Bellingham Harbor, WA	N	$ 150,000	$ 0
Chehalis R. & Tribs, WA	FDP	94,000	0
Columbia R. & Tribs, ID, MT, OR, WA, & WY	FDP	1,809,000	50,000
Columbia R. Coal Export Channel, Astoria, OR	N	0	0
Coos Bay, OR	N	0	250,000
Homer Spit Erosion, AK	FDP	297,000	0
Lower Snake R. Enhancement Plan, ID, OR & WA	RCP	0	250,000
Malheur Lake, OR	FDP	0	0
Mill Creek, WA	FDP	260,000	0
Mud Lake, ID	RDP	0	180,000
Olympia Harbor, WA	N	150,000	0
Palouse River & Tribs, ID & WA	FDP	0	112,000
Powder River & Tribs, OR	FDP	0	210,000
Puget Sound & Adjacent Waters, WA	COM	351,000	31,000
Puyullup River, WA	FDP	0	0
Rivers & Harbors in AK	FDP	946,000	0
Rogue River at Gold Beach, OR	N	0	90,000
Seattle Harbor, Duwamish WW, WA	N	0	150,000
Snohomish River & Tribs., WA	N	0	100,000
Southcentral Region, AK	N	163,000	0
Umpqua River & Tribs, OR	FDP	565,000	190,000
Upper Snake River & Tribs, ID & WY	FDP	836,000	0
Willamette River Basin, OR	COM	378,000	0
Yakima Valley Regional Water Management, WA	FDP	0	300,000
Subtotal, Studies		$5,999,000	$1,913,000
Continuation of Planning and Engineering Studies			
Bethel Bank Stablization, AK	FC	0	0
Blair & Sitcum Waterways, Tacoma Harbor, WA	N	0	0
Blue River Powerhouse, OR	MP	0	0
Centralia, WA	FC	0	400,000
Chehalis R. at S. Aberdeen & Cosmopolis, WA	FC	147,000	0
East, West, & Duwamish WW, Seattle Hbr, WA	N	750,000	0
Grays Harbor, Chehalis, & Hoquiam Rivers, WA	N	770,000	0
McNary Lock & Dam, 2nd Powerhouse, OR & WA	MP	0	0
St. Paul Island Harbor, AK	N	400,000	0
Wynoochee Hydropower/Fish Hatchery, WA	MP	0	0
Yakima River at Union Gap, WA	FC	0	0
Subtotal, Continuation of Planning and Engineering Studies		$2,067,000	$400,000

1/ FDP - Flood Damage Prevention; N - Navigation; COM - Comprehensive; FC - Flood Control; MP - Multiple Purpose; RCP - Review of Completed Project; RDP - Review of Deferred Project.

Project	Type of Project 1/	FY 1987 Budget Request	Additional Capability
GENERAL INVESTIGATIONS (continued)			
Planning and Engineering			
Johnson Creek, OR	FC	$ 0	0
Lucky Peak, 2nd Outlet, ID	FC	0	0
Peninsula Drainage District No. 2, OR	FC	0	320,000
Wenatchee Canyons 1 & 2, WA	FC	0	400,000
Subtotal, Planning and Engineering		$ 0	$720,000
TOTAL - GENERAL INVESTIGATIONS		$8,066,000	$3,033,000
CONSTRUCTION, GENERAL			
Continuing Construction			
Bonneville Navigation Lock, OR & WA	N	$20,000,000	$ 0
Bonneville Power Units, OR & WA	MP	0	0
Bonneville 2nd Powerhouse, OR & WA	MP	7,500,000	0
Chena River Lakes, AK	FC	7,000,000	0
Chetco River, OR	N	0	0
Chief Joseph Additional Units, WA	MP	6,000,000	0
Elk Creek Lake, OR	FC	0	0
John Day Lock & Dam, OR & WA	MP	0	0
Kake Harbor, AK	N	0	0
Lower Columbia R. Basin Bank Prot., OR & WA	FC	1,500,000	0
Lower Snake R. F&WL Comp Plan, WA, ID, & OR	MP	14,000,000	1,500,000
Mill Creek Lake, WA (Major Rehab)	FC	0	0
Mt. St. Helens and Vicinity, WA	FC	10,000,000	0
Mt. St. Helens Sediment Control, WA	FC	17,000,000	0
Mud Mountain Dam, WA (Dam Safety Assurance)	FC	4,000,000	0
Siuslaw River & Bar, OR	N	0	0
Snettisham, AK	MP	10,800,000	0
Strube Lake & Cougar Add'l Unit, OR	MP	0	0
Willamette River Basin Bank Protection, OR	FC	1,500,000	0
Zintel Canyon, Dam, WA	FC	0	0
TOTAL CONSTRUCTION, GENERAL		$99,300,000	$1,500,000

1/ MP - Multiple Purpose; FC - Flood Control; N - Navigation

Project	FY 1987 Budget Request	Additional Capability
OPERATION AND MAINTENANCE		
NAVIGATION (CHANNELS & HARBORS)		
Anacortes Harbor, WA	$ 103,000	$ 0
Anchorage Harbor, AK	1,920,000	0
Bellingham Harbor, I&J Street WW, WA	411,000	0
Bethel Harbor, AK	0	610,000
Blaine Harbor, WA	0	0
Chetco River, OR	502,000	0
Col & Lwr Willamette R below Vancouver, WA & Portland, OR	10,351,000	0
Col R. betwn Vanc/The Dalles, WA, OR	321,000	0
Columbia River @ Mouth, OR & WA	7,816,000	0
Columbia River @ Baker Bay, WA	666,000	0
Columbia River btwn Chinook, WA & Head of Sand Island, WA	444,000	150,000
Coos & Millicoma Rivers, OR	131,000	0
Coos Bay, OR	2,351,000	0
Coquille River, OR	279,000	0
Depoe Bay, OR	0	0
Dillingham Harbor, AK	423,000	0
Dry Pass, AK	0	635,000
Ediz Hook, WA	0	0
Edmonds Harbor, WA	0	0
Everett Harbor & Snohomish River, WA	607,000	0
Grays Harbor & Chehalis River, WA	4,537,000	1,322,000
Homer Harbor, AK	306,000	0
Kenmore Navigation Channel, WA	0	0
Kingston Harbor, WA	0	0
Lake Crockett, WA	299,000	0
Lake River, WA	0	0
Lewis River, Wa	0	0
Mats Mats Bay, WA	0	0
Neah Bay, WA	0	0
Ninilchik Harbor, AK	243,000	0
Nome Harbor, AK	1,029,000	0
Olympia Harbor, WA	114,000	0
Port Angeles Harbor, WA	0	0
Port Gamble Harbor, WA	0	0
Port Orford, OR	359,000	0
Port Townsend, WA	52,000	0
Puget Sound & Trib Water, WA	627,000	0
Quillayute River, WA	694,000	0
Rogue River Harbor at Gold Beach, OR	429,000	0
Seattle Harbor, WA	466,000	0
Shilshole Bay, WA	0	0
Siuslaw River, OR	399,000	0
Skamokawa Creek, WA	0	0
Skipanon Channel, OR	229,000	0
Smith River, OR	0	0

Project	FY 1987 Budget Request	Additional Capability
OPERATION AND MAINTENANCE (continued)		
NAVIGATION (CHANNELS & HARBORS)		
Stikine River, AK	$ 13,000	$ 0
Swinomish Channel, WA	206,000	0
Tacoma Harbor, WA	26,000	0
Tillamook Bay & Bar, OR	0	200,000
Umpqua River, OR	826,000	0
Waterway Connecting Port Townsend and Oak Bay, WA	52,000	0
Willamette River above Portland & Yamhill River, OR	0	0
Willapa River & Harbor & Naselle River, WA	0	0
Wrangell Harbor, AK	0	120,000
Wrangell Narrows, AK	0	0
Yaquina Bay & Harbor, OR	1,326,000	4,700,000
Yaquina River, OR	0	0
Subtotal - Channels & Harbors	$38,557,000	$7,737,000
NAVIGATION (Locks & Dams)		
Lake Washington Ship Canal, WA	$3,278,000	$1,370,000
Will. R. @ Will. Falls, OR	512,000	0
Subtotal - Locks and Dams	$3,790,000	$1,370,000
TOTAL NAVIGATION	$42,347,000	$9,107,000
FLOOD CONTROL		
Reservoirs		
Applegate Lake, OR	$ 679,000	$ 0
Blue River Lake, OR	616,000	0
Chena River Lakes, AK	797,000	0
Cottage Grove Lake, OR	937,000	0
Dorena Lake, OR	618,000	0
Fall Creek Lake, OR	387,000	0
Fern Ridge Lake, OR	1,271,000	59,000
Howard A. Hanson Reservoir, WA	734,000	0
Lucky Peak Lake, ID	918,000	0
Mill Creek Lake, WA	340,000	0
Mud Mountain Dam, WA	1,081,000	0
Schedule Reservoir Operations	344,000	0
Willow Creek, OR	341,000	0
Wynoochee Lake, WA	1,405,000	0
Subtotal - Reservoirs	$10,468,000	$59,000

Project	FY 1987 Budget Request	Additional Capability
OPERATION AND MAINTENANCE (continued)		
Channel Improvements, Inspections, and Miscellaneous Maintenance		
Inspection of Completed Works	$ 376,000	$ 0
Inspection of Completed PL99 Works	238,000	0
Stillaguamish River, WA	100,000	0
Tacoma, Puyallup River, WA	35,000	0
Willamette R. Bank Protection, OR	70,000	0
Subtotal - Channel Improvements, Inspections & Misc. Maintenance	$819,000	$ 0
TOTAL FLOOD CONTROL	$11,287,000	$59,000
MULTIPLE-PURPOSE POWER PROJECTS		
Albeni Falls Dam, ID	$ 2,026,000	$ 988,000
Bonneville Lock & Dam, OR & WA	13,128,000	141,000
Chief Joseph Dam, WA	6,480,000	430,000
Cougar Lake, OR	870,000	0
Detroit Lake, OR	1,543,000	0
Dworshak Dam & Reservoir, ID	7,005,000	482,000
Green Peter-Foster Lakes, OR	2,001,000	0
Hills Creek Lake, OR	567,000	0
Ice Harbor Lock & Dam, Lake Sacajawea, WA	5,822,000	1,057,000
John Day Lock & Dam, Lake Umatilla, OR & WA	11,858,000	1,548,000
Libby Dam, Lake Koocanusa, MT	3,856,000	85,000
Little Goose L&D, Lake Bryan, WA	4,707,000	989,000
Lookout Point Lake, OR	2,475,000	0
Lost Creek Lake, OR	2,326,000	0
Lower Granite Lock & Dam, WA	6,906,000	4,513,000
Lower Monumental Lock & Dam, Lake Herbert G. West, WA	4,507,000	482,000
McNary Lock & Dam, Lake Wallula, OR & WA	11,349,000	3,324,000
The Dalles Lock & Dam, Lake Celilo, WA & OR	7,099,000	1,731,000
TOTAL MULTIPLE-PURPOSE POWER PROJECTS	$94,525,000	$15,770,000
PROTECTION OF NAVIGATION		
General Regulatory Functions	$6,232,000	$ 0
Project Condition Surveys	851,000	0
TOTAL PROTECTION OF NAVIGATION	$7,083,000	$ 0
TOTAL OPERATION AND MAINTENANCE	$155,242,000	$24,936,000

TUESDAY, APRIL 15, 1986.

DOE-BPE

WITNESSES

DANIEL M. OGDEN, JR., MANAGER, PUBLIC POWER COUNCIL

Mr. **BEVILL**. Next is Mr. Daniel Ogden.

Mr. **OGDEN**. Thank you, Mr. Chairman. It is good to see you again.

Mr. Chairman, I will just summarize my statement if it may be entered in the record. I am the Manager of the Public Power Council Association of 115 municipal electric utilities, rural electric cooperative and public utilities, which are preference customers of the Bonneville Power Administration. I basically have two principal points I want to make today in regard to the President's budget as it affects Bonneville.

First, we are opposed to the sale of the Bonneville Power Administration or any of the other Federal power marketing administrations and secondly, we are opposed to the proposed changes for the repayment system used by the Bonneville Power Administration and the other power marketing administrations.

On the 13th of March at our Executive Committee meeting in Portland, Oregon, the Executive Committee adopted the following resolution, "Resolved, that the Public Power Council vigorously opposes any sale, transfer, exchange, lease or other disposition of the Bonneville Power Administration"

We had four subcommittees which conducted extensive examinations of this effort, and we concluded no alternative we could devise would be as effective as the present arrangement. We therefore concluded that no change was the appropriate solution.

We also examined carefully the proposed changes in the payment system and we find them unacceptable. The Congress rejected this proposal last year, and on November 6, 1985, the entire congressional delegation from the Pacific Northwest wrote the Director of the Budget saying that any attempt by the Administration to change the current repayment methodology would be wrong and unfair and would face opposition in the Congress.

We support that position of our delegation. As you know, Bonneville is meeting its repayment obligations, it will continue to do so and we remain committed to assuring that Bonneville will make its full interest and capital payments each year.

Thank you.

[The statement of Mr. Ogden follows:]

STATEMENT OF DR. DANIEL M. OGDEN, JR.
Manager, Public Power Council
Before the Subcommittee on Energy and Water Development
Committee on Appropriations
U.S. House of Representatives
April 15, 1986

Mr. Chairman and Members of the Subcommittee, my name is Daniel M. Ogden, Jr. I am Manager of the Public Power Council in Portland, Oregon. Our organization represents 115 municipal electric utilities, public utility districts, and rural electric cooperatives which are preference customers of the Bonneville Power Administration (BPA). From 1978 to 1984, I was Director of the Office of Power Marketing Coordination in the United States Department of Energy. I am therefore thoroughly familiar with the issues before the subcommittee today.

We oppose two recommendations contained in the President's budget: first, that the Bonneville Power Administration and the other federal power marketing administrations be sold to non-federal interests; and, second, that the system used for recovery of the costs of the federal projects be changed.

The Proposal to Sell the Bonneville Power Administration

We vigorously oppose sale of the Bonneville Power Administration. The executive committee of the Public Power Council at its regular monthly meeting March 13 in Portland, Oregon, adopted the following resolution:

"Resolved, that the Public Power Council vigorously opposes any sale, transfer, exchange, lease or other disposition of the Bonneville Power Administration." ①

The study which led to this conclusion was conducted by a special Task Force on Defederalization of the BPA, which the executive committee established by a resolution adopted at its meeting on January 9, 1986, in Seattle. The task force conducted a two-month study using four technical subcommittees: Institutional Options, Financial Issues, Legal Issues, and Technical and Operational Issues.

The Subcommittee on Institutional Options early developed a set of overall goals which the executive committee adopted. The overall goals greatly narrowed the field of inquiry for they expressly excluded from further consideration several options which the Administration has advocated. I therefore wish to explain several of these goals briefly.

First, the overall goals reject any form of private ownership of the Federal Columbia River Power System (FCRPS). As far as we are concerned, there is no compromise possible on the principle of public ownership of the Columbia River and of the multiple purpose projects which the federal government has constructed on it to serve the needs of the people of our region.

Second, the FCRPS must be preserved intact. We will not consider piecemeal disposition of the FCRPS or of the Bonneville regional power grid or the interregional intertie.

Third, any transfer, intact, to a regional public agency must not further increase the cost of power. We have recently achieved a degree of rate stability after a period of five years in which rates doubled and redoubled by nearly 600 percent. The shock has left our region's industry severely crippled and economic recovery has been very difficult. The entire region is united in its belief that we cannot absorb additional rate shocks at this time.

Fourth, the FCRPS must not be placed at auction to the highest bidder. Any transfer must be at a negotiated price which is seen as fair both to the people of the United States and to the people of the Pacific Northwest.

Fifth, preference for public bodies and cooperatives in access to the power produced by the FCRPS must be preserved in any regional institution.

These are only five of the 13 overall goals.

Of special interest are the findings of our financial analysis model. We selected four scenarios from a wide range for more detailed study: a sale price of $4.5 billion with a repayment period of 40 years with tax-exempt bonds at 7.75 percent; a sale price of $4.5 billion with 30 years repayment and taxable bonds at 10.25 percent; a sale price of $8.85 billion for 30 years at 10.25 percent; and a sale price of $22 billion for 30 years at 10.25 percent.

The $8.85 billion price--the estimated unrepaid debt as of the end of FY 1987 which the Administration proposes--would require increased revenues of $521 million the first year and a 33 percent increase in rates, nearly the same amount requested in the repayment changes of last year which the Congress rejected.

The $22 billion price--BPA's estimate of replacement cost--would force a 218 percent rate increase of $2.7 billion a year annually and would wreak economic havoc in the Northwest. Indeed the losses in tax revenues and in unemployment compensation to the federal, state and local governments would wipe out the interest the government could earn from investing the capital it realized from the sale.

With this and other information, we explored all feasible options we could devise. All of the subcommittees encountered problems of such severity in all alternative patterns that we concluded that the existing institutional arrangements are clearly superior to any alternative we could devise.

Repayment

The Administration has again recommended a proposal to revise the system used by the BPA and the other power marketing administrations for repayment of the Federal investment in hydroelectric facilities at Federal multiple-purpose water resources projects. Although this year's proposal is much more modest than last year's, it seeks the same objectives.

The Congress rejected the entire proposal last year. On November 6, 1985, the entire Congressional delegation from the Pacific Northwest wrote Mr. James Miller, Director of the Office of Management and Budget, that "any attempt by the Administration to change the current (repayment) methodology would be wrong and unfair and would face strong and successful opposition in the Congress." We strongly support the position of our Congressional delegation.

BPA is meeting its repayment obligations. On September 30, 1985, BPA made an interest payment of $374 million and an amortization payment of $266 million to the United States Treasury. These were the payments BPA had projected it would make when it went through the 1985 rate adjustment process. Payments of similar size are planned for this year. The current rate structure for BPA customers is set to ensure that timely repayment will continue to be made to the U.S. Treasury. Therefore we urge you to reject these proposed changes again. We remain committed to ensuring that BPA will fully meet its repayment obligations in a timely fashion consistent with the established procedures for determining and discharging those obligations.

The Administration's repayment proposal for FY1987 is limited entirely to the amortization of the capital which Congress has appropriated over the years to construct the Federal Columbia River Power System (FCRPS). The proposal would not change the repayment plans for the repayment of funds BPA has borrowed under its self-financing arrangements provided in the 1974 Federal Columbia River Transmission System Act and the 1980 Pacific Northwest Electric Power Planning and Conservation Act. The proposal is to require fixed equal annual amortization payments over the remaining years for each item of property. The consequence of that change would be to increase BPA revenue requirements by $139 million in FY1987. Similar large increases, varying from year to year, would occur in every year thereafter for the next several years. The government will receive no more money in the long run. Indeed, interest income would be somewhat reduced by the more rapid repayment of the capital investment.

The system which BPA now uses is similar to that used by most lending institutions. The lender expects to recover both principal and interest and schedules repayment in several equal installments which consist of part principal and part interest. In the early period of the loan, interest payments are fairly large and the principal payments small, but as repayment progresses, the outstanding principal is reduced, the interest obligations decline, and the principal payments therefore can be increased.

What the Administration proposes is a system with equal amortization payments and declining interest payments for each item of property. Thus the combined capital and interest payments would decline throughout the repayment period rather than remaining level as in a normal loan situation.

This not only overloads costs on the power users in the early years of repayment, but is also very poor rate-making policy. The Administration's proposal would send erroneous price signals to electric customers by telling them that the price of power is declining year by year, when, in fact, the cost of power is remaining fixed, or perhaps increasing slightly with inflation.

The Administration's proposal for FY 1987 also is inconsistent with the provisions of the Pacific Northwest Electric Power Planning and Conservation Act of 1980. The 1980 Act prescribes in section 7(i) a very elaborate procedure for establishing BPA rates. BPA just last year completed such an elaborate procedure and established rates for the period through September 30, 1987. The Administration's proposal would require a significant rate increase, probably from 6 to 9 per cent, depending on the allocation among rate categories. BPA cannot raise rates again without going through the complete 7(i) process, which will require comprehensive cost-of-service studies and other analyses to justify the allocation of such additional costs to the appropriate customer classes. This process, which involves an elaborate process of discovery, formal testimony, cross-examination of witnesses, and the preparation of a formal Record of Decision by the Administrator, normally takes the best part of a year. We now anticipate that BPA will have to begin the scheduled 1987 rate revision process by late summer this year. It would be extremely difficult to fulfill the procedural requirements of the 1980 Act in order also to raise rates as the Administration proposes by the beginning of FY1987 on October 1, 1986.

We object to this proposal also on procedural grounds. It is essentially the same proposal as the amendment offered on the floor of the House of Representatives on November 6, 1985, by Representative Thomas Petri (R. Wisconsin). Representative Petri withdrew the amendment when Representative George Miller (D. California) promised Mr. Petri that the Subcommittee on Water and Power of the Committee on Interior and Insular Affairs would hold hearings on the proposal if Mr. Petri would submit it to the Congress as a bill. The Interior Committee is the proper standing committee to examine such a radical change in public policy and the matter should be left to the Committee's care. It therefore is improper for the Administration to have raised the issue before this Committee and the Subcommittee should refuse to give the matter further consideration.

We ask, therefore, that you reject the proposal to require equal annual amortization payments by the BPA and the other power marketing administrations. It is unnecessary and inappropriate.

Mr. Chairman, I will be happy to answer any questions the Subcommittee may have.

pam:1:29

Mr. Bevill. Very good, I think this subcommittee shares your views about the proposed sale of Bonneville.

Mr. Ogden. Thank you, sir. I am glad to hear that.

Tuesday, April 15, 1986.

NEHALEM RIVER AND SIUSLAW RIVER NAVIGATION

WITNESSES

STANLEY A. JUD, SECRETARY, PORT OF NEHALEM, OREGON
WILBUR E. TERNYIK, VICE PRESIDENT, PORT OF SIUSLAW, OREGON
M. JOHN WOLF, PRESIDENT, PORT OF UMPQUA, OREGON
EDWIN K. HIRTE, PRESIDENT, PORT OF GOLD BEACH, OREGON
KIRB WHATLEY, CHAIRMAN, PORT OF BROOKINGS, OREGON
TOM MURRY, CONSULTANT

Mr. Bevill. Now we have a consolidation here so if Mr. Jud and Mr. Ternyik and Mr. Murry will come forward, we will consolidate the three and be glad to hear from you.

Mr. Murry. Mr. Chairman, I am Tom Murry, consultant to the commissions represented here, headed by Stanley Jud of the Port of Nehalem, Oregon; and Wilbur Ternyik, Port of Siusaw, Oregon.

Mr. Bevill. We are pleased to have each of you here again this year.

Mr. Murry. I have three statements for the Port of Gold Beach, Port of Brookings and Port of Umpqua. We would like to submit them for the record.

Mr. Bevill. Without objection, they will be made part of the record.

[The statements referred to follow:]

Statement of

M. John Wolf, President

Port of Umpqua, Oregon

before

House Appropriations Subcommittee on Energy and Water Development, April 15, 1986
Senate Appropriations Subcommittee on Energy and Water Development, April 15, 1986

supporting

$826,000 for Operation and Maintenance of Umpqua River, Oregon, Navigation Project
Included in the Corps of Engineers' Civil Works Budget for Fiscal Year 1986

and

Corps of Engineers' Budget Request for $300,000 in Fiscal 1987 for Funding
Section 111, P.L. 90-483, Mitigation of Shore Damages Attributable to Navigation Projects

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Mr. Chairman:

My name is John Wolf. I am President of the Port of Umpqua, Douglas County, Oregon.

The Port of Umpqua supports the $826,000 of Operation and Maintenance (O & M) funding requested in the Corps of Engineers' budget for fiscal 1987. These funds are essentially for dredging.

The Corps of Engineers' total budget request for $3,078,500,000 for fiscal 1987 shows offsetting receipts of $203,000,000 from proposed legislation now before Congress which will include waterway user fees and local cost sharing (H.R.6 and S. 1657). With federally authorized channel dimensions of a 26-foot deep entrance channel and a 22-foot deep river channel, the Umpqua River navigation project will fall under this legislation.

We are concerned about any cost sharing on a study or on the corrective works necessary that result from damages attributable to Federal navigation works.

In December, 1985, the Corps' Portland District undertook, and completed, an initial appraisal of wave-induced erosion of publically-owned shorelines inside the existing 3-jettied entrance at the mouth of the Umpqua River.

This study of shoreline erosion is being conducted uner Section 111 of the Rivers and Harbors Act of 1968 (Public Law 90-483) which provides authority to:

> "....investigate, study and construct projects for the prevention of mitigation of shore damages attributable to Federal navigation works."

The Corps' Portland District is also preparing an estimated $397,000 erosion control construction project under operation and maintenance funding at the inshore end of the middle, or training, jetty at the river mouth.

The existing shoreline erosion inside the Umpqua River mouth began after rehabilitation of the south and north jetty and the extension of the middle, or training, jetty and is directly attributable to these navigation works. On this basis, the mitigation required to lessen the existing shore damages, or prevent subsequent damages, should not be a cost sharing requirement of the local owners of the public lands that are being damaged by the Federal navigation works.

The navigation facilities allowing year-round waterborne carrier service for the movement of industrial products and the increasing use of recreational activities and other development at the boat basins at Winchester Bay, just inside the river mouth, justify the need for continued operation and maintenance appropriations, and for early repair of shoreline erosion caused by Federal navigation works.

The continued assistance of your committee in behalf of the Umpqua River navigation project is greatly appreciated.

Thank you.

M. John Wolf, President
Port of Umpqua, Oregon

Statement of

Edwin K. Hirte, President

Port of Gold Beach, Oregon

before

House Appropriations Subcommittee on Energy and Water Development, April 15, 1986
Senate Appropriations Subcommittee on Energy and Water Development, April 15, 1986

supporting

$429,000 Operation and Maintenance of Rogue River, Oregon, Navigation Project
Included in the Corps of Engineers' Civil Works Budget for Fiscal Year 1987
and supporting a
$90,000 Addition to Corps' Fiscal 1987 Budget Request
to Resume General Investigation Study of Rogue River Navigation Project

---

Mr. Chairman:

My name is Edwin Hirte. I am President of the Port of Gold Beach, Oregon.

The Port of Gold Beach supports the $429,000 of Operation and Maintenance funding requested in the Corps of Engineers' budget for fiscal 1986 for the Rogue River navigation project.

We ask that the Committee consider adding $90,000 to the Corps' fiscal 1987 budget to continue its study on improving and armoring the breakwater which now protects the boat basin at the mouth of the Rogue River.

In 1964 the Corps constructed a similar breakwater that was not armored and was demolished by a major flood in December of that same year. The Corps then abandoned the breakwater.

In 1971 and 1972, the Port of Gold Beach, with local donations of rock, equipment, and labor, constructed the existing breakwater on essentially the same alignment as the breakwater which had been constructed by the Corps.

Following reconstruction of the breakwater by local interests, the Corps indicated an interest in improving, armoring, and then recommending resumption of federal control of the breakwater pending further study. The material from the demolished breakwater was pushed into the boat basin by the floodwaters and has not been fully dredged from the boat basin.

The need for early and adequate maintenance dredging of the boat basin and the river entrance channel is more urgent than ever this year. The large volume of sand that has migrated some 2500 feet upstream from the ocean and deposited in the boat basin entrance has been flushed out to some extent by the larger-than-normal river freshets during the past winter months.

These river freshets pushed the sand just outside the entrance jetties forming, a bar that seriously impedes navigation and contributes to a hazard to boats using the entrance.

This restriction of the entrance comes at a time when use of Gold Beach port facilities could provide a substantial boost to the economy of the port area.

The Pacific Fishery Management Council recommendations on sport and commercial fishing seasons for 1986 indicate one of the better fishing seasons along the Southwestern Coast of Oregon, and without early and adequate dredging of the entrance channel the potential economic boost from improved fishing seasons could be lost to the local community served by the Rogue River navigation project.

The long-term major sand shoaling problem at the river mouth and in the boat basin itself, is continuing without any apparent corrective structural relief in sight.

In January, 1984, the Corps of Engineers completed construction of a 3-pile dike system between the twin-jettied river entrance to try to stop the infiltration of sand into the harbor. This system is not controlling the sand infiltration. The shoaling is closing off moorage facilities inside the harbor to such an extent that a backhoe had to dig out the end of one sand spit to permit the Corps wheelwashing dredge, SANDWICK, to leave its morrage to operate.

There is an urgent need in the short term for early and adequate annual maintenance dredging, and in the long term to provide relief from the continued heavy annual shoaling that results from the improperly functioning jetty system at the river mouth.

We again ask this Committee's assistance in providing funding to keep port facilities at Gold Beach viable.

Thank you.

Edwin K. Hirte, President
Port of Gold Beach, Oregon

Statement of

Kirb Whatley, Chairman

Port of Brookings, Oregon

before

House Appropriations Subcommitte on Energy and Water Development, April 15, 1986
Senate Appropriation Subcommittee on Energy and Water Development, April 15, 1986

supporting

$502,000 for Operation and Maintenance of Chetco River, Oregon
Navigation Project Included in the Corps of Engineers' Civil Works Budget
for Fiscal Year 1987

Mr. Chairman:

My name is Kirb Whatley. I am Chairman of the Brookings Port Commission, the sponsor of the federal navigation project on the Chetco River, Oregon.

The Port of Brookings supports the Corps of Engineers' fiscal 1987 budget request for $502,000 for annual Operation and Maintenance of the Chetco River Navigation Project.

The high annual cost of operation and maintenance results in part from the uneven jetty system at the river mouth.

The south jetty is 500 feet shorter than the north jetty. The ocean waves, generated by heavy winter storms from the south and southwest, carry sand around the short south jetty depositing it in the navigation channel. This sand shoaling in the entrance contributes to hazards to navigation.

The Chief of Engineers' report dated May 2, 1977, which recommended modification of the Chetco River projects, provided for jetties even in length into the ocean by extending the north jetty 750 feet; extending the south jetty 1,250 feet; and deepening the entrance channel to 16 feet at mean lower low water.

The last cost estimate of these improvements, which were authorized by Congress in 1981, was given by the Corps at 7.6 million dollars.

The Waterway User Charges and Cost Sharing legislation now in Congress, which would require local sponsors to share a cost of river and harbor improvements, make it financially impracticable for the Port of Brookings to meet a proposed 10% up front cost share of the Congressionally authorized 7.6 million-dollar improvement for the Chetco River. (Another 10% local cost contribution is required to be amortized over 30 years.)

Since the short, uneven south jetty at the river mouth is one of the contributors to the shoaling of the entrance, it would appear that the 500-foot extension of the south jetty to provide jetties of even length into the ocean would be the most practicable improvement to be considered at this time.

We urge the appropriation of the Corps of Engineers' budget request for $502,000 for operation and maintenance of the Chetco River in fiscal 1987, and we ask Congress to direct the Corps of Engineers to correct the defective uneven jetty system by adding 500 feet to the south jetty. Thank you.

Kirb Whatley, Chairman
Port of Brookings, Oregon

Mr. MURRY. Basically, we are all here to support our operations and maintenance funding in the Corps' budget. Four of the five port authorities represented here have small continuing project studies under way. They are all in one stage or another of progress. We have one small coastal project on the coast which has been approved, navigation improvement which may be caught under cost-sharing in pending legislation which could present a problem later.

Other than that, all five want to say thank you for the generosity of this committee in the past, and for providing the funds that have made these ports viable and expanding. That is the extent of our comment.

Thank you, sir.

Mr. BEVILL. All right, we certainly appreciate the good work you all are doing, and I am sure the subcommittee will want to continue supporting you and helping you in every way.

Would any other statements be made by any of you? If not, thank you very much.

Mr. MURRY. Thank you very much.

[The statements of Mr. Jud and Mr. Ternyik follow:]

Statement of

Stanley A. Jud, Secretary

Port of Nehalem, Oregon

before

House Appropriations Subcommittee on Energy and Water Development, April 15, 1986
Senate Appropriations Subcommittee on Energy and Water Development, April 15, 1986

supporting

U.S. Army Corps of Engineers' Civil Works Budget Request for $6,900,000
in Fiscal 1987 for Funding Section 107 Programs

Mr. Chairman:

My name is Stanley A. Jud. I am Secretary of the Port of Nehalem, Tillamook County Oregon. I am accompanied here by Port Commissioner, F. C. (Shang) Knight.

We are here to support the Corps of Engineers' fiscal 1987 budget request for $6,900,000 for funding Section 107 - Small Navigation Projects Not Requiring Specific Legislation.

A Section 107 study of a proposed 8-foot deep channel in the Nehalem River has been on hold in the Corps' Portland District office since September, 1983.

The removal of one shoal in the Nehalem River channel studied under the 107 authority, and the Corps issuance of a permit for the construction of a major marina complex on the river, is the key to effective use of the river and the economic benefits to be derived from the 12-million dollars of federal funds recently invested in restoring the jetties at the river mouth. The jetty reconstruction was completed in October, 1982.

In September, 1983, the Corps' Portland District advised the Port of Nehalem on its Section 107 Reconnaissance Study indicating that a 4-foot deep river channel, costing $395,000, could be economically justified, but that the Port-proposed 8-foot deep channel was not economically justifed and would require further study. The estimated cost of the additional study at that time was given as $343,000 for 2 more years of investigation.

The one shoal that restricts navigation is located about midway between the improved jettied entrance and the site of the proposed marina complex at Wheeler, Oregon -- approximately 6½ river miles upstream from the entrance. The natural channel on both sides of the shoal is as deep or deeper than the 8-foot channel that is proposed.

In October, 1983, a month after the Corps' Portland District advisement on the Reconnaissance Study, an application was made to the Portland District for a dredge and fill permit for the major multi-million-dollar marina complex on the river predicated on the availability of a suitable channel between it and the ocean. This marina development could have been, and could still be, the basis for economic justification of the proposed 8-foot deep river channel.

On March 16, 1984, six months after the Corps' Section 107 study went on hold, Oregon's Land Conservation and Development Commission approved an exception to the state's stringent land use laws to permit development of the proposed marina.

This exception to the land use law has been challenged in the courts by the 1000 Friends of Oregon, a special interest group which opposes the state agency's approval of the development. The case is now before the Oregon Supreme Court.

In the meantime, on May 1, 1985, the Corps' Portland District denied the dredge and fill permit for development of the marina, thereby removing one of the major economic justifications of the proposed 8-foot channel.

The Port of Nehalem spent over 40 years trying to obtain the Corps of Engineers' acknowledgement of its responsibility for maintaining the jetties, and to recommend funding for their seriously deteriorated and dangerous condition -- jetties for which an exceptionally small number of taxpayers in the port district paid one-half of the cost of the original jetty construction.

It was Congressional interest and action that brought about the Corps' acknowledgement of its responsibility to rehabilitate and maintain the Nehalem jetties. It was Congress that appropriated and directed the 12-million-dollar reconstruction of the jetties.

The Port again appeals to Congress for assistance in completion of a river channel under the Section 107 authority.

We thank you for your generous assistance in the past and for allowing us to come before you on this subject which is critical to the economic and social well-being of the constituency we serve.

Thank you.

Stanley A. Jud, Secretary
Port of Nehalem, Oregon

Statement of
Wilbur E. Ternyik, Vice-President
Port of Siuslaw, Oregon
before
House Appropriations Subcommittee on Energy and Water Development, April 15, 1986
Senate Appropriations Subcommittee on Energy and Water Development, April 15, 1986
supporting
$339,000 Included in the Corps of Engineers' Civil Works Budget Request for
Fiscal 1987 for Operation and Maintenance of the Siuslaw River Navigation Project
and
Corps of Engineers' Civil Works Budget Request of $6,900,000
in Fiscal 1987 for Funding Section 107 - Small Navigation Projects Not
Requiring Specific Legislation

Mr. Chairman:

My name is Wilbur Ternyik. I am a Commissioner of the Port of Siuslaw, Oregon. I am accompanied here today by another Port Commissioner, Ted Weber.

We are here to support the Corps of Engineers' Fiscal 1987 budget request for $339,000 for Operation and Maintenance of the Siuslaw River Navigation Project, and the Corps' request for $6,900,000 for funding under Section 107 - Small Navigation Projects Not Requiring Specific Legislation.

The Corps completed its 25¼-million-dollar construction of the Siuslaw jetty extension project this past October, 1985. The Corps' budget request for $339,000 for operation and maintenance in fiscal 1987 represents a 130% reduction in annual operation and maintenance cost based on 5-year average annual operation and maintenance cost of $780,200 during the years 1981 through 1985, inclusive.

While winter weather has prohibited the Corps to complete an accurate hydrographic survey of the depth in the entrance channel, the large-scale reduction in annual operation and maintenance funding for fiscal 1987 obviously reflects the Corps' estimate of the effectiveness of the jetty extensions completed last October.

A small boat basin development at the inshore end of the north jetty has been held up awaiting completion of the jetty extensions and an exception from Oregon land use laws.

In July, 1981, the Corps' Portland District published a draft, Detailed Project Report And Environmental Impact Statement, on this basin for 315 boats (85 commercial, 10 charter, and 220 recreational). This draft contained a favorable benefit/cost ratio of 1.3 to 1 on this basin which was estimated to cost $1,795,000 in 1981. The Corps' study cost at that date was reported to be $165,000.

An update on this project is now appropriate and will complement other port developments now underway following completion of the jetty extensions.

We extend our sincere appreciation for the federal funding of these projects which will provide long-term economic benefits to the Central Oregon Coast and Lane County. Thank you.

Wilbur E. Ternyik
Vice-President
Port of Siusaw, Oregon

TUESDAY, APRIL 15, 1986.

WASHINGTON STATE PORTS

WITNESSES

HENRY R. SOIKE, GENERAL MANAGER, PORT OF GRAYS HARBOR
JOE FAKER, COMMISSIONER, PORT OF TACOMA
JEFF F. KASPAR, DEPUTY EXECUTIVE DIRECTOR, PORT OF BELLINGHAM
DOUGLAS P. EDISON, EXECUTIVE DIRECTOR, PORT OF OLYMPIA

Mr. BEVILL. Next we have Henry Soike.

Congressman Dicks wanted to be here at this time, but he couldn't make it. We are pleased to have each of you here, and Mr. Soike, I will recognize you and you may proceed as you wish.

[The statement of Mr. Dicks follows:]

Mr. Chairman and Members of the Committee:

I am sorry that I did not have the opportunity to appear before you today and personally introduce the representatives from various Washington State ports. I was attending the funeral of our good friend and late colleague, the Honorable Joseph P. Addabbo.

Today we have representatives from four Washington State ports, Tacoma, Grays Harbor, Bellingham and Olympia, testifying in support of funding requests for their respective Corps of Engineers projects. I have also submitted a written statement from the Port of Seattle. Each of these funding requests has been included in the President's budget request with the exception of the Port of Tacoma. I fully support the President's budget requests for these ports, however, I also wish to draw attention to the great need to provide $450,000 in funding for the Port of Tacoma.

During your subcommittee's hearings of February 24, I questioned General Robertson about the Blair-Sitcum waterways project. He stated that the next step in the study is completion of bridge replacement studies at an estimated cost of $450,000. The Port of Tacoma is experiencing tremendous growth and will soon need to fully utilize the Blair waterway. It is imperative for the port's growth, and for the economic impact that this will have on the surrounding community, to move forward with this project in a timely fashion.

Thank you for your consideration of the requests made today by representatives of the Washington State ports.

Norman D. Dicks
Member of Congress

Norm Dicks

Port of Seattle

April 14, 1986

The Honorable Norman D. Dicks
U.S. House of Representatives
2429 Rayburn House Office Building
Washington, D.C. 20515

Dear Norm:

Enclosed is a statement by the Port of Seattle in support of the FY 1987 budget request of the Corps of Engineers for the navigation and improvement project for the East, West and Duwamish Waterways.

Would you please submit this statement on the Port's behalf at the House Appropriations Subcommittee on Energy and Water Development hearing on April 15, 1986. Thank you for your continued assistance on this matter.

Sincerely,

Jim

James D. Dwyer
Executive Director

KR/2687i
Enclosure

P.O. Box 1209
Seattle, WA 98111 U.S.A.
(206) 728-3000
Telex 703433

Committee on Appropriations
Subcommittee on Energy and Water Development
U.S. House of Representatives

Statement of the Port of Seattle on the FY87
Budget Request of the Corps of Engineers

The Port of Seattle supports the FY87 budget submission of the Corps of Engineers regarding the navigation improvement project for the East, West and Duwamish Waterways.

The Duwamish project resulted from a study authorized by the Senate Public Works Committee on May 18, 1956. The project was recommended for implementation by a decision of the Board of Engineers for Rivers and Harbors on July 18, 1984, and was approved by the Chief of Engineers in his Final Report dated May 31, 1985. An authorization for construction of the project is included in H.R. 6 and S. 1567 as they passed the House and the Senate.

The Duwamish project involves the deepening, widening, and, in one area narrowing, of the Federal channels in the East, West, and lower Duwamish Waterways, and the replacement of a railroad bridge. The project will also benefit from the removal of a low-level highway bridge and its replacement by a high-level bridge that improves vessel access. The Corps of Engineers has found a favorable benefit to cost ratio of 2.5 to 1.0 for the project. The project would allow the Port of Seattle to expand to accommodate the growth of trade with the countries of the Pacific Rim. The Port of Seattle is geographically well-situated to handle Pacific trade since it is closer to the East Asian nations than the other major U.S. ports and since it has excellent rail connections to the U.S. mid-west and to the east coast.

FY87 will be third year of continued planning and engineering work by the Corps of Engineers on the Duwamish project. This work should be completed so that the project can be brought to the point of readiness for construction. We urge that the committee act favorably on the Administration's FY87 request for funds for this work.

Mr. **Soike**. Thank you very much, Mr. Chairman, and members of the committee.

With me is Jeff Kaspar from the Port of Bellingham, and he has a prepared statement and I would ask him to have the opportunity to review his statement.

Mr. **Bevill**. All right, without objection, each of your prepared statements will be made a part of the record.

Mr. **Kaspar**. Thank you, Mr. Chairman.

Mr. Chairman, members of the committee, I am Jeff Kaspar, Deputy Director of the Port of Bellingham, which is located on the Canadian border, approximately 20 miles south of Vancouver, British Columbia.

The Port of Bellingham's deep water facilities serve our districts' major employers by providing a cost-effective facility for the export of finished products, locally manufactured, to world markets. Also, our Port offers the "Bellingham Alternative" to Canadian shippers looking for more competitive dockside rates for access to Pacific Rim markets.

Last year, cargo movements at the Whatcom Creek Waterway in Bellingham were down over 25 percent. As is indicated tc the Port in a Star Shipping letter, which is attached, dated January 18, 1985, not only is the strong dollar working against our local manufacturers, but the depth of our Federal waterway has placed "the Port of Bellingham at a competitive disadvantage" with other shipping facilities.

In spite of these problems, the Whatcom Creek Shipping Terminals exported over three quarters of a million tons of U.S. products to world markets in 1985, a substantial contribution to our Port District's total tonnage of 15,000,000.

Because world market competition requires that our local Port facilities be able to accommodate the size vessel providing the best economies of scale to our shippers for them to remain competitive, and because a 30-foot channel no longer provides our vital industrial clients this critical advantage, the U.S. Corps of Engineers proposes to begin a reconnaissance study of our main shipping channel as a necessary initial action to determine the needed additional depth.

A deeper channel could facilitate more economical cargo movement. With this in mind, the Port and the Corps of Engineers are prepared to take the first step, a reconnaissance study contained within this budget. The Port of Bellingham is encouraged to see budgeted the $150,000 necessary for the initiation of such an important project to our districts' economy.

Additionally, for the committee's information, our Port district has not requested Corps assistance since 1977 and only do so when the need and the benefit to our economic community can be clearly shown.

I appreciate the opportunity to address the committee.

Thank you.

[The letter referred to follows:]

JAN 22 1985 REC'D

STAR SHIPPING (U.S.W.C.) INC.

80 YESLER WAY, SEATTLE, WA 98104 • TELEPHONE: (206) 622-1626
CABLE ADDRESS: "STARBAY" • WU TELEX: 321181 • TWX: 910 444 4224

Head office:
Star Shipping A/S
Bergen, Norway

Branch offices:
Houston, TX
Livorno, Italy
Long Beach, CA
New York, NY
Portland, OR
San Francisco, CA
Sydney, N.S.W.
Tokyo, Japan
Vancouver, B.C.

Mr. Hugh Wilson
Port of Bellingham
625 Cornwall ave.
Bellingham, Wash. 98225

JANUARY 18, 1985

Dear Hugh,

Star Shipping has had; and is continuing to have; problems with the water depth on the approaches to , and alongside, the Port of Bellingham docks. Vessels involved so far are:

DATE	VESSEL	VOY.	DRAFT	DELAY
1/16/85	STAR CARRIER	185/BC185	9.5M	7.0 HRS
1/18/85	STAR MAGNATE	185/J185	10.0M	8.0 HRS

The cost to Star Shipping to date is estimated at $20,000.00 to $23,000.00.

As you realize this puts the Port of Bellingham at a competitive disadvantage with other ports on Puget Sound.

We will continue to have vessels of deep draft calling to load in the foreseeable future.

Please advise us what actions are being taken to correct this situation.

Sincerely yours,

STAR SHIPPING (U.S.W.C.) INC.

Christopher S. Short,
Operations Superintendent

CS:ddk

cc: Geir Sylte

Mr. **Bevill**. Very good.

Mr. **Soike**. Mr. Chairman, members of the committee, I am from the Port of Grays Harbor, I have had the pleasure of testifying before you many times in the past, and we are most appreciative that there is a line item in the budget of $770,000 for Grays Harbor. That will complete our continuation of planning and engineering for our NEPA project, it is in the Roe bill and Abnor bill and we hope there will be a successful conference and we can get on with the project.

I thank you for the opportunity to be here today.

I have submitted a statement for the record.

On my right is Douglas Edison, Executive Director for the Port of Olympia.

[The statement of Mr. Soike follows:]

STATEMENT OF HENRY E. SOIKE, GENERAL MANAGER PORT OF GRAYS HARBOR - STATE OF WASHINGTON FOR THE RECORD UNITED STATES SENATE AND HOUSE OF REPRESENTATIVES COMMITTEES ON APPROPRIATIONS SUB COMMITTEES ON ENERGY AND WATER DEVELOPMENT

APRIL 15, 1986

Mr. Chairman and Members of the Committee, my name is Henry E. Soike and I am the General Manager of the Port of Grays Harbor which is Washington States only Deep Water Coastal Port.

Our navigation facilities provide the access link between federal, state, and private timber resources and the Pacific Rim countries of Japan, Korea, and the Peoples Republic of China.

While 1985 was not a particularly good year for the timber industry, we are pleased to report that waterborne shipments from Grays Harbor totaled 4,076,419 tons. Also, this was the highest volume of forest products exported in the 70-plus year history of our Port.

In 1965 the Corps of Engineers initiated a study to determine the feasibility of increasing the existing 30-foot draft of our navigation channels. The Board of Engineers recommendation that the project be authorized at 38 feet has been endorsed by the Chief of Engineers and the Secretary of the Army. Formal authorization of the project is included in S 1567 and HR 6.

Our 1985 Annual Report reveals that 82 percent of the vessels departing from Grays Harbor exceeded the current project depth. This was accomplished only by over dredging berth areas, accepting vessel delays and sailing at maximum tide conditions

Continuation of Planning and Engineering on this project has been ongoing by the Corps and we are pleased the budget contains $770,000 to complete this effort. We wish to express our appreciation to the Committee for its past considerations in providing necessary funds for the Grays Harbor Deeper Draft project.

I thank you for the opportunity to submit this Statement for the record.

Henry E. Soike

Henry E. Soike, General Manager
Port of Grays Harbor-Washington

Mr. Edison. Mr. Chairman, Members, thank you for this opportunity also.

My purpose in coming today is really to plant the seed. We are at the beginning of long-range planning and as Peggy Bird from the Pacific Northwest Waterways Association, we will be the recipients of a $150,000 reconnaissance study this coming fiscal year to chart the course for long-range development of our harbor.

I will summarize my statement very briefly.

The Port of Olympia has seen a tremendous resurgence in international trade and shipping since we instituted a 20-year growth plan starting in 1982. Since that time, we have had a 226 percent increase in vessel calls, and over 200 percent increase in cargo tonnage coming through our harbor.

Budd Inlet is at the head of Puget Sound and the Port of Olympia is the second most central ship terminal to service the corridor between Olympia and Portland metropolitan areas. We have a 30-foot channel, and a turning basin that has not been enlarged to its fully authorized size from the 1947 Corps of Engineers plans. Like the Port of Bellingham, we are taking the first step, looking towards a new generation of ships and shipping, knowing that these projects take twenty years in the making.

So with that, I do submit the full statement for the record, and thank you for your time.

[The statement of Mr. Edison follows:]

915 N. Washington St.
Post Office Box 827
Olympia, Washington 98507
206 586-6150

PORT OF OLYMPIA USA

April 9, 1986

STATEMENT OF DOUGLAS P. EDISON, EXECUTIVE DIRECTOR
PORT OF OLYMPIA - STATE OF WASHINGTON
FOR THE RECORD
UNITED STATES SENATE AND HOUSE OF REPRESENTATIVES
COMMITTEES ON APPROPRIATIONS
SUB COMMITTEES ON ENERGY AND WATER DEVELOPMENT
APRIL 15, 1986

Mr. Chairman and Members of the Committee, I am Douglas Edison, Executive Director of the Port of Olympia, Washington. My purpose in addressing the Committee is to lay the groundwork for long-range plans to cooperatively enlarge the Olympia harbor on Budd Inlet.

The Port of Olympia has seen a resurgence of ship activity since a twenty-year growth plan was instituted in 1982. The key to Olympia's recent growth is a five-year, locally funded, $21 million capital expansion plan which is now half completed. The improved facilities are being supported by an aggressive market strategy which has already turned results. Specifically, we've generated a 226% increase in vessel traffic from 1983 to 1985, tonnage is up 211% in the same period, and more importantly, the mix of cargoes, customers, exports and imports, and vessel types is becoming more diverse. Olympia is experiencing not only rapid growth but also increased economic balance and stability.

Budd Inlet is at the head of Puget Sound, and the Port of Olympia is the most central ship terminal for serving the Portland to Seattle corridor. In 1945, the Corps of Engineers harbor plan approved a 500 foot wide channel and a 960 by 3350 foot turning basin, both to a low water depth of 30 feet. These are dredged to an actual width of 300 feet and 750 by 3000 feet respectively at the full 30 feet of depth. The 1940's vintage cargo vessels of 6 - 8,000 tons have given way to vessels of 25 - 40,000 tons. Ships serving Olympia continue to grow, and harbor con-

Commissioners
W.L. "Wes" Barclift
O.R. "Ray" Dinsmore
J.D. "Jim" Wright

Executive Director
Douglas P. Edison

straints will one day affect market development efforts. Conscientious planning will tell us to what limits to pursue harbor enlargement.

Towards that end, a reconnaissance study has been funded through the Corps of Engineers for the coming fiscal year. It should define Olympia's future ambitions as a growing international terminal. What is most important, and what I appeal to the Committee for, is that Olympia's planning efforts be backed by a creative, visionary, Federal policy linking harbor development objectives with international trade opportunities. For Olympia to be a responsible steward of scarce waterfront resources, we must depend on national policies for waterway financing which lead to achievable results.

Thank you for this time to introduce you to the successes and ambitions of the Port of Olympia. Please expect to hear more from the Port of Olympia as we set our vision on the horizon of the 21st century.

Douglas P. Edison
Executive Director

Mr. BEVILL. Very good.

Mr. SOIKE. Mr. Chairman, we have also submitted for the record a statement by the Port of Seattle supporting a line item for the continuation of planning and engineering on a Duwamish project there.

[The statement referred to follows:]

STATEMENT OF THE PORT OF SEATTLE ON THE FISCAL YEAR 1987 BUDGET REQUEST OF THE CORPS OF ENGINEERS

The Port of Seattle supports the FY87 budget submission of the Corps of Engineers regarding the navigation improvement project for the East, West and Duwamish Waterways.

The Duwamish project resulted from a study authorized by the Senate Public Works Committee on May 18, 1956. The project was recommended for implementation by a decision of the Board of Engineers for Rivers and Harbors on July 18, 1984, and was approved by the Chief of Engineers in his Final Report dated May 31, 1985. An authorization for construction of the project is included in H.R. 6 and S. 1567 as they passed the House and the Senate.

The Duwamish project involves the deepening, widening, and, in one area narrowing, of the Federal channels in the East, West, and lower Duwamish Waterways, and the replacement of a railroad bridge. The project will also benefit from the removal of a low-level highway bridge and its replacement by a high-level bridge that improves vessel access. The Corps of Engineers has found a favorable benefit to cost ratio of 2.5 to 1.0 for the project. The project would allow the Port of Seattle to expand to accommodate the growth of trade with the countries of the Pacific Rim. The Port of Seattle is geographically well-situated to handle Pacific trade since it is closer to the East Asian nations than the other major U.S. ports and since it has excellent rail connections to the U.S. mid-west and to the east coast.

FY87 will be the third year of continued planning and engineering work by the Corps of Engineers on the Duwamish project. This work should be completed so that the project can be brought to the point of readiness for construction. We urge that the committee act favorably on the Administration's FY87 request for funds for this work.

Mr. SOIKE. Our last witness today is Mr. Joseph Faker from the Port of Tacoma. He is a Commissioner with that port. I welcome the opportunity for him to testify.

Mr. BEVILL. We will be glad to hear from you.

Mr. FAKER. Mr. Chairman, members of the committee, my name is Joe Faker and I am a commissioner of the Port of Tacoma in the State of Washington.

My purpose in testifying today is to request your continuing support of the Blair-Sitcum navigation Federal water resources project at the Port of Tacoma. The principal features of this project include the replacement of a narrow bridge and the deepening of the Blair Federal Waterway.

The Port of Tacoma has, because of its efficient and economical means to move cargo, become one of the most rapidly growing ports in our nation. It is estimated that by the end of 1986 it will be the sixth largest container port in North America and the 21st largest container port in the world.

Our deepwater marine terminal facilities also provide the shipping link for many strategic imported commodity resources such as alumina, copper, lead and zinc ores, and natural rubber.

We believe that the importance of the growth of this port to our nation is reflected in the fact that international trade with Pacific Rim countries through Pacific Coast ports has grown dramatically over the last ten years, and has now surpassed that of the U.S. and Europe.

We also believe that the Port of Tacoma has the unique resources necessary to meet this challenge of increasing trade with the Pacific Rim countries. Of the port's 2400 acres, over 800 acres are available for development. To meet projected growth, the port needs to be able to put more of its land to use—for such facilities as container terminals, warehouses and bulk handling facilities.

About 400 acres of this available land are in the Upper Blair Waterway and are suitable for use as deepwater marine terminals. This land cannot be developed to its maximum potential until a wider bridge provides access to this area, and the waterway is dredged to accept modern shipping.

A related area of serious concern to the Port of Tacoma and the Federal Government is the impact of the narrow opening of the Blair Waterway bridge on operational support of the U.S. Army and military sealift command. Our Pierce County Terminal at the southern reach of the Blair Waterway is a key point of embarkation for military shipments during times of defense emergencies.

The continued military use of this excellent terminal which is so ideally suited to meet this requirement has been threatened by safety limitations of the narrow bridge opening. Recently the military traffic management command expressed its deep concern to the port about the marine safety hazards our Blair Waterway Bridge presents to the passage of their high speed, strategic transport, USNS REGULUS. Attached is a copy of this letter which points up yet another reason for the project to proceed without delay.

We have another unique resource at the Port of Tacoma which we believe is key to our recent growth. That resource is our potential for providing efficient and economical transit of cargo to the midwest and east coast of the U.S. Gentlemen, we are a truly national port with over 70 percent of the containers passing through our facilities traveling to or from the interior of the country. To continue to develop facilities such as container terminals and intermodal yards, ample land is needed adjacent to marine terminals. Much of this land is located on the Upper Blair Waterway.

In 1975 the Corps of Engineers recommended the Blair-Sitcum Project, for both economic and safety reasons, to the United States Congress. This project includes the deepening of the waterways to approximately 45 feet below mean-low low-water, and the replacement of the present Blair Bridge with a moveable mid-level bridge with a 45-foot vertical and 300-foot horizontal clearance.

In 1982, the Corps reaffirmed the necessity of that original analysis. We are very gratified that the Blair-Sitcum project is a part of the recent water resources legislation. We sincerely hope that it will be finalized by Congress in 1986 with formal authorization of this important project.

Because of recent growth at the Port of Tacoma, it is even more important that the unlocking of the important resources of the Blair Waterway proceed expeditiously. We believe that the date of need for Blair Waterway improvements has been accelerated.

It is vital, therefore, that appropriate planning and engineering proceed on schedule. Unfortunately, we find that there are no funds in the President's budget for this project in 1987. The Corps of Engineers, however, stated during their testimony to Congress on February 24, 1986, that the next step in the process is completion of bridge replacement studies. The estimated cost of this work is $450,000.

We respectfully request your support in adding an appropriation of $450,000 in fiscal year 1987 so that orderly progress in necessary planning and engineering can proceed.

Thank you.

Mr. BEVILL. That was a very good presentation. Thank you very much.

[The statement of Mr. Faker follows:]

TESTIMONY FOR THE RECORD
OF JOSEPH E. FAKER, COMMISSIONER
PORT OF TACOMA - STATE OF WASHINGTON
BEFORE THE

UNITED STATES SENATE AND HOUSE OF REPRESENTATIVES
COMMITTEES ON APPROPRIATIONS
SUB COMMITTEES ON ENERGY AND WATER DEVELOPMENT

APRIL 15, 1986

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, MY NAME IS JOSEPH E. FAKER AND I AM A COMMISSIONER OF THE PORT OF TACOMA IN THE STATE OF WASHINGTON.

MY PURPOSE IN TESTIFYING TODAY IS TO REQUEST YOUR CONTINUING SUPPORT OF THE BLAIR-SITCUM NAVIGATION FEDERAL WATER RESOURCES PROJECT AT THE PORT OF TACOMA. THE PRINCIPAL FEATURES OF THIS PROJECT INCLUDE THE REPLACEMENT OF A NARROW BRIDGE AND THE DEEPENING OF THE BLAIR FEDERAL WATERWAY.

THE PORT OF TACOMA HAS, BECAUSE OF ITS EFFICIENT AND ECONOMICAL MEANS TO MOVE CARGO, BECOME ONE OF THE MOST RAPIDLY GROWING PORTS IN OUR NATION. IT IS ESTIMATED THAT BY THE END OF 1986 IT WILL BE THE SIXTH LARGEST CONTAINER PORT IN NORTH AMERICA AND THE 21st LARGEST CONTAINER PORT IN THE WORLD.

OUR DEEPWATER MARINE TERMINAL FACILITIES ALSO PROVIDE THE SHIPPING LINK FOR MANY STRATEGIC IMPORTED COMMODITY RESOURCES SUCH AS ALUMINA, COPPER, LEAD AND ZINC ORES, AND NATURAL RUBBER. AND WITH OUR OUTSTANDING INLAND RAIL AND HIGHWAY TRANSPORTATION CONNECTIONS, WE HANDLE EIGHT TIMES AS MUCH VOLUME IN U.S. EXPORTS TO THE WORLD MARKETPLACE WITH SUCH BASICS AS FOREST PRODUCTS AND GRAINS TO THE HIGH VALUE GOODS AS FARM MACHINERY/EQUIPMENT, TURBINES, AND LOCOMOTIVES.

WE BELIEVE THAT THE IMPORTANCE OF THE GROWTH OF THIS PORT TO OUR NATION IS REFLECTED IN THE FACT THAT INTERNATIONAL TRADE WITH PACIFIC RIM COUNTRIES THROUGH PACIFIC COAST PORTS HAS GROWN DRAMATICALLY OVER THE LAST TEN YEARS. IN 1980, FOR THE FIRST TIME, THE VOLUME OF TRADE BETWEEN THE U.S. AND ASIA SURPASSED THAT OF THE U.S. AND EUROPE. THE MARGIN WAS NINE PERCENT. BY 1983, THE VOLUME OF PACIFIC TRADE WAS AHEAD OF ATLANTIC TRADE BY 24 PERCENT. THIS TREND IS EXPECTED TO CONTINUE, AND WE MUST BE PREPARED TO HANDLE THIS FUTURE GROWTH.

WE ALSO BELIEVE THAT THE PORT OF TACOMA HAS THE UNIQUE RESOURCES NECESSARY TO MEET THIS CHALLENGE OF INCREASING TRADE WITH THE PACIFIC RIM COUNTRIES. OF THE PORT'S 2,400 ACRES, OVER 800 ACRES ARE AVAILABLE FOR DEVELOPMENT. TO MEET PROJECTED GROWTH, THE PORT NEEDS TO BE ABLE TO PUT MORE OF ITS LAND TO USE--FOR SUCH FACILITIES AS CONTAINER TERMINALS, WAREHOUSES AND BULK HANDLING FACILITIES. ABOUT 400 ACRES OF THIS AVAILABLE LAND ARE ON THE UPPER BLAIR WATERWAY AND ARE SUITABLE FOR USE AS DEEP-WATER MARINE TERMINALS. THIS LAND CANNOT BE DEVELOPED TO ITS MAXIMUM POTENTIAL UNTIL A WIDER BRIDGE PROVIDES ACCESS TO THIS AREA AND THE WATERWAY IS DREDGED TO ACCEPT MODERN SHIPPING.

A RELATED AREA OF SERIOUS CONCERN TO THE PORT OF TACOMA AND THE FEDERAL GOVERNMENT IS THE IMPACT OF THE NARROW OPENING OF THE BLAIR WATERWAY BRIDGE ON OPERATIONAL SUPPORT OF THE U.S. ARMY AND MILITARY SEALIFT COMMAND. OUR PIERCE COUNTY TERMINAL AT THE SOUTHERN REACH OF THE BLAIR WATERWAY IS A KEY POINT OF EMBARKATION FOR MILITARY SHIPMENTS DURING TIMES OF DEFENSE EMERGENCIES. THE CONTINUED MILITARY USE OF THIS EXCELLENT TERMINAL WHICH IS SO IDEALLY SUITED TO MEET THIS REQUIREMENT HAS BEEN THREATENED BY

SAFETY LIMITATIONS OF THE NARROW BRIDGE OPENING. RECENTLY THE MILITARY TRAFFIC MANAGEMENT COMMAND EXPRESSED ITS DEEP CONCERN TO THE PORT ABOUT THE MARINE SAFETY HAZARDS OUR BLAIR WATERWAY BRIDGE PRESENTS TO THE PASSAGE OF THEIR HIGH SPEED, STRATEGIC TRANSPORT, USNS REGULUS. ATTACHED IS A COPY OF THIS LETTER WHICH POINTS UP YET ANOTHER REASON FOR THE PROJECT TO PROCEED WITHOUT DELAY.

WE HAVE ANOTHER UNIQUE RESOURCE AT THE PORT OF TACOMA WHICH WE BELIEVE IS KEY TO OUR RECENT GROWTH. THAT RESOURCE IS OUR POTENTIAL FOR PROVIDING EFFICIENT AND ECONOMICAL TRANSIT OF CARGO TO THE MIDWEST AND EAST COAST OF THE U.S. WE ARE A TRULY NATIONAL PORT WITH OVER 70 PERCENT OF THE CONTAINERS PASSING THROUGH OUR FACILITIES TRAVELING TO OR FROM THE INTERIOR OF THE COUNTRY. MANY OF THESE CONTAINERS ARE PUT ON RAIL CARS IN SPECIAL PORT FACILITIES KNOWN AS "INTERMODAL YARDS." THE PORT OF TACOMA HAS BEEN A LEADER IN THE DEVELOPMENT OF THESE YARDS AND WAS THE FIRST PORT ON THE WEST COAST TO HAVE AN ON-DOCK INTERMODAL FACILITY. IT IS NOW THE ONLY PORT ON THE WEST COAST WITH TWO SUCH DOCKSIDE INTERMODAL YARDS. TO CONTINUE TO DEVELOP FACILITIES SUCH AS CONTAINER TERMINALS AND INTERMODAL YARDS, AMPLE LAND IS NEEDED ADJACENT TO MARINE TERMINALS. MUCH OF THIS LAND IS LOCATED ON THE UPPER BLAIR WATERWAY.

IN 1975 THE CORPS OF ENGINEERS RECOMMENDED THE BLAIR-SITCUM PROJECT, FOR BOTH ECONOMIC AND SAFETY REASONS, TO THE UNITED STATES CONGRESS. THIS PROJECT INCLUDES THE DEEPENING OF THE WATERWAYS TO APPROXIMATELY 45-FEET BELOW MEAN-LOW LOW-WATER, AND THE REPLACEMENT OF THE PRESENT BLAIR BRIDGE WITH A MOVEABLE MID-LEVEL BRIDGE WITH A 45-FOOT VERTICAL AND 300-FOOT HORIZONTAL CLEARANCE.

IN 1982, THE CORPS REAFFIRMED THE NECESSITY OF THAT ORIGINAL ANALYSIS. WE ARE VERY GRATIFIED THAT THE BLAIR-SITCUM PROJECT IS A PART OF THE RECENT WATER RESOURCES LEGISLATION. WE SINCERELY HOPE THAT IT WILL BE FINALIZED BY CONGRESS IN 1986 WITH FORMAL AUTHORIZATION OF THIS IMPORTANT PROJECT.

BECAUSE OF RECENT GROWTH AT THE PORT OF TACOMA, IT IS EVEN MORE IMPORTANT THAT THE UNLOCKING OF THE IMPORTANT RESOURCES OF THE BLAIR WATERWAY PROCEED EXPEDITIOUSLY. WE BELIEVE THAT THE DATE OF NEED FOR BLAIR WATERWAY IMPROVEMENTS HAS BEEN ACCELERATED. IT IS VITAL, THEREFORE, THAT APPROPRIATE PLANNING AND ENGINEERING PROCEED ON SCHEDULE. UNFORTUNATELY, WE FIND THAT THERE ARE NO FUNDS IN THE PRESIDENT'S BUDGET FOR THIS PROJECT IN 1987.
THE CORPS OF ENGINEERS, HOWEVER, STATED DURING THEIR TESTIMONY TO CONGRESS ON FEBRUARY 24, 1986 THAT THE NEXT STEP IN THE PROCESS IS COMPLETION OF BRIDGE REPLACEMENT STUDIES. THE ESTIMATED COST OF THIS WORK IS $450,000.

WE RESPECTFULLY REQUEST YOUR SUPPORT IN ADDING AN APPROPRIATION OF $450,000 IN FISCAL YEAR 1987 SO THAT ORDERLY PROGRESS IN NECESSARY PLANNING AND ENGINEERING CAN PROCEED.

JOSEPH E. FAKER
COMMISSIONER
PORT OF TACOMA
TACOMA, WASHINGTON

DEPARTMENT OF THE ARMY
MILITARY TRAFFIC MANAGEMENT COMMAND
HQ. PACIFIC NORTHWEST OUTPORT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON 98134-2391

REPLY TO
ATTENTION OF:

20 February 1986

Office of the Commander

Mr. Bruce MacKenzie
Director Terminal Services
Port of Tacoma
P.O. Box 1837
Tacoma, WA 98401

Dear Mr. MacKenzie,

As you know, the Department of Defense completed the loading of the USNS Regulus for Exercise Team Spirit 86 on February 3rd. The deployment portion of the exercise was, by most measures, a success as we rolled on and lifted aboard nearly 1200 military vehicles and containers in approximately 48 hours without incident. We are now involved in the planning for the redeployment phase of the exercise and we need to resolve a pressing issue.

The Military Sealift Command (MSC) has expressed serious concern with bringing the USNS Regulus into the Pierce County Terminal for the discharge on May 3 and 4. Their principle objection is the narrow clearance between the supports on the East Eleventh Street Bridge in the Blair Waterway. Not only does MSC fear that marine safety is compromised by taking the 946' x 105½' ship through the Blair, but the obstacles extended by the Puget Sound Pilots Assn seem to echo that concern. During the loadout the pilots required calm seas, numerous tugs, daylight and high-tide before they would navigate the waterway with the converted SL-7. When such restrictions are placed on operations, they tend to negate the value of the government's substantial investment in a ship that can both load and cross the ocean with the speed of the USNS Regulus. Substantial delays in both arrival and departure during the deployment can be traced to concern for navigating the Blair.

The Pierce County Terminal, with its sizable paved acreage adjacent to the berths, is ideal for a military loadout in virtually every other respect, but with our sealift experts so deeply concerned about the marine safety hazards we must seek an alternative site. Please consider the options available to the government and recommend an alternative unloading berth. Our needs include a minimum space for extension of the ship's side port ramp of 60 feet (115 feet is preferred so that the ramp can be extended perpendicular to the ship), and short transit access to 15-20 acres of staging area, railloading facilities, and a helicopter reassembly and take-off area.

Please respond expeditiously so that our planning can continue. Thanks for your support.

Sincerely,

James W Wogan

JAMES W. WOGAN
LTC, TC
Commanding

TUESDAY, APRIL 15, 1986.

ROGUE BASIN

WITNESSES

THE HONORABLE ROBERT F. SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

MARTIN G. BAUER, VICE PRESIDENT, ROGUE BASIN ASSOCIATION

THOMAS W. McGILL, DIRECTOR AND MEMBER, ROGUE BASIN ASSOCIATION EXECUTIVE COMMITTEE

Mr. BEVILL. We have our good friend and colleague, Congressman Bob Smith here.

Bob, we would be glad to hear you and your witnesses.

Mr. SMITH. Thank you, Mr. Chairman.

Mr. BEVILL. Your prepared statements will be made part of the record, and you may proceed.

Mr. SMITH. Thank you, Mr. Chairman, and especially for you giving us the opportunity to kind of wedge in here. I apologize for the confusion that we caused you.

These gentlemen have come 3000 miles——

Mr. BEVILL. We are always delighted to accommodate friends.

Mr. SMITH. Before I introduce them, may I say that the dreams of the Rogue Basin Association for the past 30 years have almost been accomplished, but certainly would not have been without your assistance and this subcommittee's assistance, and a large part of the victory of the construction of the last phase of Elk Creek Dam would not have occurred without your support, Mr. Chairman, and I especially appreciate that and I know these gentlemen do as well.

Mr. Chairman, I have the privilege of introducing as part of an ongoing 30-year program these gentlemen who have the tenacity to continue the effort for the Rogue Basin Association, Mr. Martin Bauer on my right, who is Vice President of the Rogue Basin Association, and General Manager of Portola Lumber Company and is a very active resident of Grants Pass. With him his wife, Ann, and their son Justin.

Mr. BEVILL. It is nice to see you.

Mr. SMITH. On my far right Mr. Tom McGill, Mr. Chairman, Director of the Rogue Basin Association and the Southern Oregon Manager of Pacific Northwest Bell for Communications.

They are here now and we will not take a great deal of your time, but we thank you again for this opportunity.

Mr. BEVILL. Very good.

Mr. BAUER. Thank you, Representative Smith.

Mr. Chairman, today we appear before you in a mood of celebration. We celebrate the selection of Grants Pass, one of the Rogue Basin communities, as an all American city. The Rogue Basin project is one of this city's major assets. We celebrate the 30th anniversary of our Rogue Basin Association and the 25th year of the citizens of our valley have sent a delegation to Congress in support of the Rogue Basin Project.

Eighty-five directors have served our association, 35 of them are no longer alive. Today a second generation is completing the work started by their parents.

As you can see from the presence of my son, Justin, we are beginning to groom the third in case they need to take over.

We celebrate the completion of three of four components of the project, fish runs are breaking records, water quality is unsurpassed, flooding is in check, and hydropower is generating seven times the revenue anticipated.

The two dams and one fish hatchery now completed are a roaring success. Finally, we celebrate the construction phase of Elk Creek Dam, the fourth and final project component.

We come today as representatives of the citizens of Oregon, Rogue Valley, to thank you and the other members of the Congress, past and present, for making our multi-purpose Rogue Basin Project a reality. You have helped create a water storage system that preserves the beauty and vitality of a designated wild and scenic river, provides drinking water, irrigation, flood control, hydropower, and incredible recreational opportunities for hundreds of thousands of people who live in the area, and the millions more who visit it. We thank you today, and so will generations to come.

Here are some specifics about the Project's construction status. All activities are currently confined to the Elk Creek component. They are as follows:

A by-pass road, constructed in two phases, is 70 percent complete in the first phase; 40 percent in the second. Completion of both is expected by October 1 of this year.

The dam itself is now 6 percent complete:

The site of the dam's foundation is being excavated. Temporary construction offices, laboratories, and storage facilities are under construction. One hundred and ten people have been put to work. And, the contractor is moving even more quickly than we had hoped.

Specific Corps capability will, as always, be described in their testimony. We ask only that the project remain in the funding cycle, so that the goal of a fully operational Elk Creek Dam will be attained by June 1989.

For your interest we have attached reprints of news articles which detail some of the history of Rogue Basin flooding and our Association.

Thank you for your usual courteous attention, and, again, for your support over the thirty years of the Rogue Basin Project.

Thank you.

[The statement of Mr. Bauer follows:]

Rogue Basin Flood Control & Water Resources Association

PRESIDENT
Anne Basker
1650 Fruitdale Drive
Grants Pass, OR. 97526

VICE PRESIDENT
Marty Bauer
P.O. Box 967
Grants Pass, OR 97526

SECRETARY
Bob Lee
3387 Lone Pine Road
Medford, OR. 97504

TREASURER
Dennis Hoffbuhr
219 No. Oakdale, Ave.
Medford, OR. 97501

DIRECTORS -
Grants Pass
Bill Ford, County Comm.
D.W. (Bill) Gillespie
Harold G. Herman
K.R. (Ken) Hickenbottom
Tom McGill
Del Robertson

Medford
Jack Hanel
Gerald T. Latham
Tam Moore

Central Point
Franklin H. Gebhard
Vernon Gebhard
Louis Wegner

Gold Hill
Leonard Andrews

Applegate
Francis Krouse

Prospect
Eugene F. Burrill

TESTIMONY SUBMITTED TO:

ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
BEFORE THE
UNITED STATES SENATE AND HOUSE OF REPRESENTATIVES
APRIL 15 and 16, 1986

SUBMITTED AND PREPARED BY:

MARTIN G. BAUER, VICE PRESIDENT, R.B.A.

THOMAS W. McGILL, DIRECTOR AND MEMBER OF
R.B.A. EXECUTIVE COMMITTEE

WITH PREPARATION ASSISTANCE FROM:

ANNE G. BASKER, PRESIDENT, R.B.A.
VINCENT H. STEINKAMP, ELK CREEK PROJECT ENGINEER

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- --Temporary construction offices, laboratories, and storage facilities are under construction.
- --One hundred and ten people have been put to work. And,
- --The contractor is moving even more quickly than we had hoped.

Specific Corps capability will, as always, be described in their testimony. We ask only that the project remain in the funding cycle so that the goal of a fully operational Elk Creek Dam will be attained by June 1989.

For your interest we have attached reprints of news articles which detail some of the history of Rogue Basin flooding and our Association.

Thank you for your usual courteous attention, and, again, for your support over the thirty years of the Rogue Basin Project. We shall be happy to respond to questions or to supply additional material as requested.

[From the Medford Mail Tribune, Mar. 23, 1986]

The Rogue Basin's Dam Makers

(By Allen Hallmark)

It would be difficult to imagine a more determined or tenacious group of people than the members of the Rogue Basin Flood Control and Water Resources Association.

Celebrating their 30th anniversary this year, association members can claim to have done more to change the character of the once untamed Rogue River tahn any other single organization.

A generation after its founding at a public meeting in Grants Pass in February 1956, the association is finally on the verge of completing the goal that it set out to accomplish so many years ago—the construction of a system of dams to control flooding in the Rogue River Basin.

Working closely with the Army Corps of Engineers, the association sent delegations to Congress year after year, first to get the project authorized and then to get the money to build it.

Battling budgets and enviromentalists, the association fought stubbornly for construction of three large dams: Lost Creek Applegate and Elk Creek, known collectively as the Rogue Basin Project.

Determined that the dams would enhance the Rogue River's famous salmon and steelhead fishery as well as provide for a host of other water resource benefits, the association insisted that the Cole M. Rivers Fish Hatchery be built before any of the dams. Named for a fishery biologist who worked closely with the association, the hatchery was completed in 1972 at a cost of $10 million.

During the association's 20th year in 1976, Lost Creek Dam, the first large dam on the mainstem of the Rogue, was completed, and when the dam was closed the next year, the river was forever changed.

In the same year, voters in Jackson and Josephine counties overwhelmingly approved an advisory vote on the Applegate Dam that paved the way for its construction, completed in 1980.

But for years, it seemed likely that the third and final dam in the system, Elk Creek, would not be built because of the outcry of opponents ranging from the timber industry to environmentalists.

Even supporters of Lost Creek and Applegate dams questioned the necessity of Elk Creek. But the association refused to back down. They insisted that the project had been designed as a system and that it should be completed as a system.

And this month, their persistence paid off when construction began on the $121 million dam.

That price tag is greater than the entire three-dam system was expected to cost when Congress first authorized the project in 1962.

Not everyone is thrilled about the Rogue Basin Association's success. Longtime RBA foe and former Jackson County commissioner Isabel Sickels bristled and growled one long "grrrrr" when asked to comment about the association's 30th anniversary.

"Bully for them," Sickels said with grudging admiration. "Persistence will out. They achieved their success through polities rather than through merit . . . I'm an environmentalist, and I feel strongly than the anadromous fishery has been decimated across the earth by dams, and I hate to see it happen here."

But when Sen. Mark Hatfields, R-Ore., talks about the association, it's almost hard to believe that he's referring to mere mortals.

"I am convinced that future generations will call them blessed," Hatfield said in a telephone interview.

"Without their vision and foresight, there never would have been one dam, much less two with one more in the making. We should all feel indebted to them. In fact, they should put all of their names up there on those dams."

Of the 72 people who have served on the RBA's board of directors over the years, 35 have passed away, Only one member of the original board, Francis Krouse is still active in the association. But many are still alive who worked on the project from its inception, including William Jess, Jack Hoffbuhr, Ben Day, Wally Martin and Jack Hanel.

And others, including Anne Basker, current RBA chairman, and Gerald Latham, who served as chairman from 1980–84, were deeply affected by the event that set the association off on its 30-year odyssey.

That event was the flood of December 1955. Memories of the destruction of the flood and an even bigger one in December 1964, remain the driving force that have kept the aging association members working hard to complete their goal.

Basker remembers the night the '55 flood struck all too well. A young mother with four children, including one born only a month before the flood, Basker and her family got very little sleep on the night of Dec. 21-22 as they listened to the river raging behind their house on old Highway 99 in Grants Pass.

The next monring, they were driven from their home just before the flood waters struck.

"I remember somebody stuck our Christmas tree with all its decorations still on it in the back of a pickup truck," Basker said. "And I remember feeling absolutely helpless."

Latham, who retired as the Mail Tribune's general manager several years ago, had different problems dealing with the '55 and '64 flood waters. As circulation manager, he chartered a small plane to deliver papers to 52 subscribers in Sams Valley who were cut off from the rest of the country by the flood waters.

During the 1964 flood, Latham improvised a different system to get newspapers across the river. This time he shot an arrow attached to a long clothes line across the swollen river and using a pulley to get bundles of papers to the other side.

But the real reason the association succeeded probably had less to do with personal memories and more to do with dogged determination.

Former state Rep. Kip Lombard, R-Ashland, put it this way:

"They had a plan and they stuck to it. As always in an organization like that you have to have dedicated individuals with a firm purpose and goal."

THE DAMS—1955 FLOOD PROVIDED ROGUE BASIN PLAN EARLY MOMENTUM

(By Allen Hallmark)

Back in 1955 when Ike was president and cars were beginning to sprout tailfins, the Rogue River flowed more or less unhindered from its origins in the Cascades near Crater Lake all the way to the Pacific Ocean at Gold Beach.

The last big one in 1927, no major floods has disturbed. The river was prone to periodic flooding, but since along its banks. The total population of the Jackson, Josephine and Curry counties, through which the river flowed, hovered around 100,000 in those days—far less than half of the number who live in the Rogue Basin today.

Two small dams, Savage Rapids near the city of Rogue River and Gold Ray near Gold Hill, provided water for irrigation and a small amount of hydroelectric power, respectively. They also hindered the upstream migration of salmon and steelhead, but they didn't provide any flood control.

Oldtimers say there was no outcry from the citizenry to build the kind of massive flood control and hydroelectric dams on the Rogue River, such as had been built on the Columbia, the Colorado and many other major rivers in the West.

In fact, they say, most people wanted to keep the river as pristine as possible because the Rogue had become nationally and even internationally recognized for its scenic beauty and its outstanding fishing and white water boating, initially through the writings of novelist Zane Gray in the early part of the century.

In the '40s and '50s the Rogue River Valley had become a favorite retreat for many Hollywood stars, who came to fish and get away from the pressures of Tinsel Town. Some, like Ginger Rogers, even bought property along the river.

The river was a big meal ticket for Rogue Valley residents, most of whom loved to fish and relax by its sparkling waters as much as did the tourists and movie stars.

So, when the Bureau of Reclamation issued its so-called "Plan A" proposal in 1948 for a major dam on the Rogue at Lewis Creek, there was little public support for the plan, says Jack Hanel, now a fishery biologist for Pacific Power & Light Co. in Medford.

Hanel had been hired right out of Oregon State University to be project leader for an extensive study of the river's fishery for the U.S. Fish and Wildlife Service 1949-53.

He worked along side the late Cole M. Rivers, a fishery biologist for the state Game Commission, who was called "Mr. Rogue River" by those who respected his unparalleled knowledge of the river's ecology.

Their task was to evaluate the impact of Plan A on the anadromous fishery.

Their studies showed that some 30 percent of the spring chinook salmon spawning redds would be destroyed if the Bureau of Reclamation's Plan A were built. The huge project would have impounded about 1 million acre-feet of water—twice as much as Lost Creek Lake—behind a dam near the Rogue River Lodge not far upstream from Trail.

Even though the studies conducted by Rivers and Hanel indicated that something needed to be done to protect the fishery because irrigation withdrawals and logging were beginning to take a toll on fish by reducing summer flows in the lower river and raising the water temperature into the 80s each August, the biologists couldn't support the bureau's dam.

"Almost everybody including all the conservation groups opposed Plan A," Hanel says.

So, the plan was shelved and most people didn't think too much more about the idea of damming the Rogue.

But a few days before Christmas in 1955, an event occurred that was to change not only the thinking of most people in the valley but was to set in motion concerted effort that has not flagged in the 30 years that have elapsed since then.

For several days a warm rain had drenched a snowpack in the mountain. On the night of Dec. 20 the river flooded, leaving a trail of destruction from Shady Cove to Grants Pass.

"Water was rolling over the railroad bridge below Gold Ray Dam," the Mail Tribune reported. "At Rogue River all the houses and businesses on the south side of Highway 99 were inundated."

Before the flood waters receded on Dec. 22, the rampaging river had destroyed or damaged numerous bridges, houses and businesses. It had chased 300 people from their homes and caused damage estimated at $4 million in 1955 dollars.

The '55 flood got people's attention. Within days, some of the most prominent citizens in the Rogue Valley began attending a series of meetings, sponsored by the Grants Pass Chamber of Commerce, to see what could be done to prevent a recurrence of the flooding.

Realize that the bureau's Plan A dam had little public support, the citizens instead invited the Army Corps of Engineers to send someone from its Portland District office to discuss alternatives.

That someone turned out to be a capable young civil engineer by the name of Henry Stewart.

"Up to the 1955 flood, the people were not quite unanimous but pretty vociferously against building any big dams on the river," Stewart says. "After the flood, many said, "Even if we have to destroy the fishery, we better have dams."

In early February 1956, a public meeting was called at the Redwoods Hotel in Grants Pass to which representatives from dozens of local governments, special districts, organizations and agencies were invited.

At that meeting, the Rogue Basin Flood Control and Water Resources Association was born. "The name of the group came about as the result of a compromise," William Jess, who was elected the first chairman of the association, says in his brief history of the RBA. "During the orgnaizational meetings, if became clearly apparent that there was wider interest in the river than just flood control."

Wally Martin, a Grants Pass lawyer who served as the association's secretary in the '50s and early '60s, says there was quite a power struggle within the group in those days.

"We had our rifts and disagreements," Martin says.

There was one faction that wanted to get a flood-control dam built as soon as possible, regardless of the fishery impact, and another group that wanted to go much slower to ensure that the fishery and other resources would be protected as much as possible, he says.

"We had the 'we-won't-wait-for-anything' group, and we had the 'if-we-only-slow-down-a-little-bit-we'll-get-this-done-better' faction," Martin says.

Despite the infighting, the association quickly became an extremely effective lobbying organization, composed of 19 directors, 16 representing various member governments or groups and three appointed by the chairman.

In the early years, leadership was provided by two men whose disparate skills dovetailed perfectly, according to longtime RBA members.

They were Jess, an Eagle Point farmer, who served as chairman from 1956–60 and again from 1966–80, and the late Ben Hilton, a Grants Pass real estate agent, who was chairman from 1960–66.

Jess, who has since retired from public life, had a legendary memory and an ability to understand the most complex technical and legal aspects of water resources legislation.

Hilton, whose hop farm on the Rogue near its confluence with the Applegate was wiped out by the '55 flood, was a flamboyant figure, known for his fancy 10-gallon hats, his cowboy boots and his fast talking.

"Hilton pretty much ran that thing (the association) at times," Martin says. "There were folks who disagreed with him. People who resented the way he assumed authority.

"But Bill Jess was a very cool head," Martin adds. "Hilton pushed it, and Jess pulled it together. I have nothing but admiration for Hilton and also for Bill Jess."

With Hilton pushing and Jess pulling, the association soon convinced Congress to appropriate $20,000 for the Corps to prepare a plan to provide flood control and other water resources benefits.

An interagency team, headed by the Corps' Henry Stewart, then began a long process of planning the Rogue Basin Project.

The team, made up of about a dozen people with technical training in everything from geology to fishery from a number of state and federal agencies, investigated 36 possible damsites on the Rogue and its tributaries and gradually winnowed them down to the three that were authorized by Congress in 1962.

Over a three-year period, the team held dozens of well-attended public meetings in all parts of the Rogue Basin.

"As fast as we knew anything, we passed it on to the public," Stewart says. "We had to bring the people along with us. If we had done it in any other way, it would have been 'just another attempt by those SOB's to put one over on us'."

Early in the process, Stewart and another team member, Travis Roberts of the U.S. Fish and Wildlife Service, decided to visit Mail Tribune Editor Eric W. Allen Jr., now retired, seeking his support for their endeavor.

"Trav and I had come to the conclusion that if Eric Allen said no, we probably didn't have the guts to go ahead with it," Stewart says. "We walked in there sweating bullets, and he asked us some very pointed questions. But when it was all over, he said something to the effect, 'Fellows, I think you're on the right track'."

Allen says the work done by Stewart and his team and by the Rogue Basin Association convinced him that the project was sound from the beginning and, he says, he's never had any reason to change his mind.

"It was one of the first truly multiple-use projects," Allen says. "It seemed to me that it was a very well designed and thoroughly thought-out project."

In 1959, the team released its first recommendation calling for construction of the three dams, Lost Creek, Elk Creek and Applegate at the same locations where Lost Creek and Applegate dams stand today and where Elk Creek dam is under construction.

The Rogue Basin Association insisted that plan be reworked, however, saying that it didn't fully take into account two laws passed by Congress in 1958. Those laws required federal projects to provide enhancement of downstream fishery and storage for municipal and industrial purposes.

The Corps rewrote the plan to the association's satisfaction and in 1960, the RBA began lobbying Congress to pass a bill, largely drafted by Jess, which would authorize construction of the project.

The bill estimated the total cost of the three-dam project at about $106.7 million. Today with two dams built and a third under construction, the Corps has spent $246.68 million on the project and estimates that the total bill will reach $348.97 million by the time Elk Creek Dam is completed in 1988.

Each year since 1962, the RBA has sent a delegation to Washington to lobby Congress for appropriations to construct the various components of the project.

Francis Krouse, an Applegate farmer who is the last orginal RBA director still active in the association, probably holds the record with 14 trips to Washington.

Jerry Latham, RBA chairman from 1981–84, says the association never hired a lobbyist and managed to get by on a budget that rarely exceeded $9,000 a year, most of which was usually provided by Jackson and Josephine counties.

In December 1964, another flood, even more devastating than the '55 disaster, caused an estimated $16 million damage along the Rogue. The damage was four times greater than the earlier flood—not only because the water rose several feet higher, but because considerable construction had been allowed in the floodplain including two mobile home parks in Grants Pass that were heavily damaged.

After the '64 flood, public pressure for dam construction soared, and RBA members became even more determined to get their project funded.

ROGUE BASIN PROJECT: A CHRONOLOGY

Here is a chronology of some of the major events that have marked the 30-year history of the Rogue Basin Flood Control and Water Resources Association:

December 1955: A massive flood on the Rogue River causes more than $4 million in damages along the Rogue River from Shady Cove to Grants Pass.

February 1956: The Rogue Basin Association is officially formed at a meeting in Grants Pass.

September 1961: the Army Corps of Engineers presents a plan calling for construction of a three-dam project.

October 1962: Congress authorizes the Rogue Basin Project, including the Lost Creek, Applegate and Elk Creek dams. The project's cost is estimated at $106.7 million.

December 1964: Another flood, even larger than the 1955 flood, ravages the Rogue River and its tributaries, causing an estimated $15.9 million in damages in Jackson County alone.

October 1966: Congress approves construction funds for Lost Creek dam.

June 1970: The Corps awards a $9.1 million contract to H.A. Andersen Co. of Portland for construction of the Cole M. Rivers Fish Hatchery below the future site of Lost Creek dam.

April 1972: Citizens League for Emergency Action on the Rogue, the first organized opposition to a Rogue Basin Project dam raises questions about potential adverse impacts of Lost Creek dam.

June 1972: The Corps awards $48.2 million contract to Bohemia Lumber Division of Umpqua River Navigation Co. for construction of Lost Creek dam. By October 1972, 360 workers are on the job.

April 1973: Sierra Club launches opposition to Applegate dam and funding by Jackson City of Rogue Basin Association lobbying efforts on behalf of dam. Later, Stop Applegate Dam Committee if formed.

January 1974: Flood causes an estimated $6 million damage along the Applegate River.

April 4, 1975: Corps opens bids for construction of Elk Creek dam, apparent low bid of $39.68 million by Perini Corp. of San Francisco will never be awarded.

April 19, 1975: State Water Resources Board votes 4-3 to revoke its support for Elk Creek dam because of concerns about turbidity impact on fishery.

June 1975: Congressman Jim Weaver, D-Ore., reverses his support for Elk Creek dam, asks House committee to reject funding.

August 1975: The Jackson County commissioners vote 2-1 to deny money to the association for lobbying for Applegate and Elk Creek dams.

November 1976: Voters in Jackson and Josephine counties give the proposed Applegate dam a ringing endorsement in a nonbinding advisory vote, 41,335 to 26,176.

February 1977: The Corps closes diversion tunnel at Lost Creek Dam and begins impounding water.

February 1980: The Corps releases supplemental environmental impact statement for Elk Creek dam citing studies showing that turbidity created by dam would be within acceptable limits.

December 1980: The Corps begins filling reservoir behind Applegate dam.

April 1981: Water Policy Review Board votes to restore state support for Elk Creek dam at the request of the association.

October 1982: U.S. General Accounting Office publishes a report critical of Elk Creek dam, contending that Corps overestimated annual benefits of project by 76 percent.

February 1984: Corps of Engineers officials in Washington, D.C., withdraw Corps' support for Elk Creek dam, saying it's an uneconomical project if considered on its own rather than as part of three-dam system.

May 1984: Sen. Mark Hatfield, R-Ore., now chairman of the Senate Appropriations Committee, begins big push for Elk Creek dam funding.

June through November 1985: Weaver loses several attempts to get House to deauthorize Elk Creek dam. Corps officials say the dam will produce 48 cents in benefits for each $1 in costs.

January 1986: Judge James Burns refuses to issue injunction to stop Elk Creek dam sought by Oregon Natural Resources Council.

January 1986: Corps awards $62.78 million contract to Ohbayashi Corp. of Japan to build Elk Creek dam.

March 1986: Blasting for Elk Creek dam foundation begins. Construction of third and final Rogue Basin Project dam is underway.

Mr. BEVILL. Thank you.

Mr. McGill?

Mr. McGILL. No statement.

Mr. BEVILL. Thank you very much.

TUESDAY, APRIL 15, 1986.

WATER PROJECTS IN COLORADO

HONORABLE MICHAEL L. STRANG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

FRED V. KROEGER, PRESIDENT, SOUTHWESTERN WATER CONSERVATION DISTRICT OF COLORADO AND DIRECTOR, ANIMAS-LA PLATA WATER CONSERVANCY DISTRICT

FRANK E. MAYNES, ATTORNEY FOR SOUTHWESTERN WATER CONSERVATION DISTRICT OF COLORADO, ATTORNEY FOR SOUTHERN UTE INDIAN TRIBE OF IGNACIO, COLORADO, ATTORNEY FOR DOLORES WATER CONSERVANCY DISTRICT

CHRIS A. BAKER, CHAIRMAN, SOUTHERN UTE INDIAN TRIBE, IGNACIO, COLORADO

LEONARD C. BURCH, MEMBER, SOUTHERN UTE INDIAN TRIBAL COUNCIL

ALTON R. NORDWALL, SUPERINTENDENT, BUREAU OF INDIAN AFFAIRS, SOUTHERN UTE AGENCY, IGNACIO

VIDA PEABODY, SOUTHERN UTE INDIAN TRIBAL COUNCIL MEMBER

GUY PINNECOOSE, JR., SOUTHERN UTE INDIAN TRIBAL COUNCIL MEMBER

EDWARD BOX, SR., SOUTHERN UTE INDIAN TRIBAL COUNCIL MEMBER

THOMAS H. SHIPPS, ATTORNEY FOR SOUTHERN UTE INDIAN TRIBE

JOHN E. MURPHY, PRESIDENT, ANIMAS-LA PLATA WATER CONSERVANCY DISTRICT BOARD

ROBERT E. DE NIER, DIRECTOR, ANIMAS-LA PLATA WATER CONSERVANCY DISTRICT BOARD

JOHN T. PORTER, MANAGER, DOLORES WATER CONSERVANCY DISTRICT BOARD

DAVID HERRICK, DIRECTOR, DOLORES WATER CONSERVANCY DISTRICT BOARD

DORIS BRENNAN, LA PLATA COUNTY, COLORADO COMMISSIONER

ANN BROWN, MAYOR, CITY OF DURANGO, COLORADO

J. PAT GREER, DIRECTOR, LA PLATA WATER CONSERVANCY DISTRICT BOARD DIRECTOR, ANIMAS-LA PLATA DISTRICT BOARD OF DIRECTORS

TOM TAYLOR, MAYOR, CITY OF FARMINGTON, NEW MEXICO

WILLIAM MANCHESTER, FARMINGTON CITY COUNCIL MEMBER

MANUEL HASTINGS, FARMINGTON CITY COUNCIL MEMBER

DWIGHT ARTHUR, ATTORNEY FOR CITY OF FARMINGTON

HONORABLE RAY KOGOVSEK, FORMER COLORADO REPRESENTATIVE, U.S. HOUSE OF REPRESENTATIVES

ERNEST HOUSE, ANIMAS-LA PLATA PROJECT

J. WILLIAM McDONALD, DIRECTOR, COLORADO WATER CONSERVATION BOARD

MICHAEL OCCHIATO, PRESIDENT, PUEBLO CITY COUNCIL

Mr. BEVILL. Now we have our good friend and colleague, Congressman Mike Strang from Colorado.

We will be glad to hear you and your witnesses at this time.

Mr. STRANG. Thank you, Mr. Chairman.

Mr. BEVILL. Our former colleague and friend, Ray Kogovsek is also here. Come and sit up here, Ray.

Mr. KOGOVSEK. Thank you, Mr. Chairman.

Mr. STRANG. We have a number of friends from the Indian Tribes of New Mexico and Colorado. I know your time is limited, so I will be brief.

Mr. **Bevill**. I know you will want to put everybody's name in the record.

Mr. **Strang**. Yes, and we will submit those to you. We have members of both tribes here.

I am pleased to have this opportunity, Mr. Chairman, to appear before you today and to accompany our friends from the Third District of Colorado, including leaders of the Indian tribes, local governments and water leaders to speak in support of the funding for the Animas-La Plata Project and the Fountain Creek Flood Control Project.

We also welcome our friends and supporters from New Mexico.

Mr. Chairman, we very much appreciate your visit to Southwestern Colorado last month to look at the Animas-La Plata project and talk to the people of the area. We are grateful for your demonstration of interest and positive comments. We think that was a real plus.

Mr. **Bevill**. I certainly enjoyed the visit and enjoyed that good southern hospitality you have out there in Colorado.

Mr. **Strang**. I am pleased to report the States of Colorado, New Mexico, the Indian tribes, local governments and conservancy districts have reached an agreement in principle. This document has been endorsed and signed by every member of the Colorado and New Mexico congressional delegation, Mr. Chairman.

The negotiators worked long and hard. The agreement is fragile; the State of Colorado has already stepped up to bat and appropriated $6 million for the Indian water pipeline which is part of the agreement. It is a comprehensive agreement as I say, but it is fragile. The acceptance of this agreement in principle is crucial and I urge the committee to support the $1 million request for Animas-La Plata for fiscal year 1987. There will be other comments, Mr. Chairman.

[The statements of Mr. Strang and associates follow:]

TESTIMONY
of
THE HONORABLE MICHAEL L. STRANG
Third District - Colorado
Before The
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
House Committee on Appropriations

April 15, 1986

MR. CHAIRMAN, Members of the Subcommittee, thank you for again allowing me to come before you on behalf of the people of the Third Congressional District of Colorado, to speak in support of water reclamation and flood control projects crucial to our citizens.

There are friends from the Third District here today, including the leaders of the Indian Tribes, local government and water leaders, who will present detailed testimony to the Committee. We also welcome our friends from New Mexico. I will be brief, and request that my full statement be entered in the record, and ask that I might submit additional comments for the record.

I want to urge the Committee to give serious consideration to the thoughtful remarks that will be presented by the Colorado contingent here this afternoon. My support for Animas-LaPlata Project in Southwestern Colorado and the Fountain Creek Flood Control Project in Pueblo, is stronger than ever. These projects reflect the hard work that has gone into them. They deserve your support and that of the Congress and Administration.

ANIMAS - LaPLATA PROJECT

Since we last met here, Mr. Chairman, you and I have had the opportunity to tour the site of the Animas-LaPlata Project and visit with the people of the area. I know they appreciated deeply the time you took to make the visit, and I am personally grateful for your demonstrated interest and the positive comments you made while there.

I am also gratified the Administration, for the first time, requested construction funds for the Animas-LaPlata Obviously, I support that $1 million request for FY '87. As you recall, this Committee and the Congress gave first approval to an initial construction funding of $1 million in the FY '85 Supplemental Appropriations Bill. That funding is subject to a cost sharing agreement being reached between the Secretary of the Interior and the non-Federal entities in Colorado and New Mexico.

MR. CHAIRMAN, and Colleagues, in February, the Bureau of Reclamation issued a revised cost estimate for the project, reducing the project cost by $68.6 million. Last month an Agreement in Principle, setting forth a comprehensive settlement of of the Indian water rights claims and non-Federal cost sharing, was transmitted to Interior Secretary Donald Hodel. The agreement was presented with a bipartisan cover letter of endorsement signed by every Member of the Colorado and New Mexico Congressional Delegations.

This Agreement in Principle was crafted during long and painstaking negotiations involving the two states, the Indian Tribes, local governments and conservancy districts. It was not an easy task. It was accomplished, frankly, to the amazement of some people in the Administration. But it is a fragile package. The driving force behind the agreement is a total settlement and quantification of the Indian water rights established under the Winters' Doctrine on streams in Southwestern Colorado.

The Animas-LaPlata Project is the key to fulfilling past breaches of faith and commitments of the Federal trustees, not only to the Indian Tribes, but to non-Indians as well. The Administration insisted the Indian water rights issue be resolved in the context of the cost sharing agreement. This agreement does that. The non-Federal sponsors in Colorado and New Mexico have reached into their pockets. The State of Colorado has already appropriated $6 million for an Indian drinking water pipeline that is part of this agreement. We have spoken and demonstrated our commitment to this Agreement in Principle and this project.

The agreement is a unique solution to a unique problem. The Federal government has been part of the problem. We are asking that the Federal government now be part of the solution. This special opportunity may not present itself again. The alternative - lengthy, costly, divisive litigation, will produce no winners. Acceptance of this Agreement in Principle, everyone can claim victory with honor. I urge the Committee to appropriate the $1 million requested for Animas-LaPlata in FY '87.

FOUNTAIN CREEK PROJECT

MR. CHAIRMAN, the Fountain Creek Flood Control Project in Pueblo, Colorado has also received prior support from this Committee, and rightly so. Since we met here a year ago, the omnibus authorizing bills, H.R. 6 and S. 1567, have now passed both Houses of Congress. The Fountain Creek Project is included in both bills. I share your hope that this long overdue authorizing legislation will get through the Conference Committee soon, back to both Houses, and on to the President.

Although Fountain Creek is not included in the Administration's FY '87 budget request, it is not because of lack of support from the Corps of Engineers or local sponsors. The local commitment remains strong in the form of cost-sharing that meets the new criteria soon to be approved by the Congress. Assistant Secretary Robert Dawson has expressed his personal support for the project and commended the people of Pueblo for the degree of their commitment.

The fact is this project meets every criteria including a cost-benefit greater than unity at the current discount rate (8-5/8%) set by the Corps for all its flood control projects, and was recommended by the Corps for funding. In response to a question submitted on my behalf for the record during your February 18th hearing with the Corps, Secretary Dawson acknowledges the project met all the Corps criteria. However, OMB, using an arbitrarily high rate of interest (10%), did not recommend the project, not on its merits, but purely as a means of eliminating projects.

Mr. CHAIRMAN, I urge the Committee to demonstrate its continued support for this much needed project to protect life and property from disastrous flooding that has occurred in the past. I ask you to allocate $1.36 million for initial construction of the Fountain Creek Project in FY '87.

I would also appreciate and recommend Committee support for the ongoing Colorado projects funding requests at the FY '87 levels proposed by the Administration. I will be submitting more detailed comments in support of including the Stagecoach Project in Routt County, Colorado, among the projects to be funded under the Small Reclamation Projects Act. Authorization to revise that program is now under consideration in the Congress.

Again, thank you for your attention, your past support for Colorado reclamation and flood control needs, and your continuing diligent efforts to address similar needs across the nation.

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1987

Tuesday, February 18, 1986.

DEPARTMENT OF THE ARMY

ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS) AND THE CHIEF OF ENGINEERS

WITNESSES

ROBERT K. DAWSON, ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

LT. GEN. E.R. HEIBERG, CHIEF, CORPS OF ENGINEERS

MAJ. GEN. HENRY J. HATCH, DIRECTOR OF CIVIL WORKS

DON CLUFF, CHIEF, PROGRAMS DIVISION, DIRECTORATE OF CIVIL WORKS

Opening Remarks

Mr. Bevill. The committee will come to order.

We are glad to welcome Secretary Dawson and congratulate him on his confirmation as Assistant Secretary of the Army, and we are proud of him, and especially we are proud of the state he is from.

Mr. Dawson. Thank you very much.

— — —

Mr. Myers. There is bad weather out in the Midwest, we have been fogged in and rained in the last few days, Mrs. Smith is unable to be here today, she wanted to be, but she has some questions she will submit for the record. We have also some questions from Jim Lightfoot of Iowa, and Mike Strang of Colorado has some questions they would like you to respond to for the record.

[The information follows:]

Questions Submitted by Congressman Strang

FOUNTAIN CREEK PROJECT

Question. Based on information provided the Congress by the Corps of Engineers, the Fountain Creek flood control project in Pueblo, Colorado, has a positive benefit to cost ratio. The basis for evaluating the benefit-cost ratio for this project is the same as used for virtually all other similar Corps projects. You have personally on at least two occasions, written to Pueblo city officials, congratulating them on the degree of local funding support they have demonstrated and specifically expressed your personal support for the project. Initial construction funding of $1.36 million was included in the FY '86 budget proposal from the Administration. The project was said to have been a high priority Corps project.

Based on these facts, I would appreciate a detailed response as to why the Administration decided not to include an initial funding request for the Fountain Creek project in its FY '87 budget proposal?

Answer. We recognize the continued support of the local sponsor for the Fountain Creek at Pueblo, Colorado, project and support the efforts expended to date by the sponsor to provide the traditional items of local cooperation and cash contribution during the construction period. It is unfortunate that the project which was a recommended new construction start for FY 1986 was not included in the Fiscal Year 1985 Supplemental. However, while the project met our preliminary selection criteria for a new start in the Fiscal Year 1987, the Administration, in its effort to achieve the required $144 billion deficit ceiling, imposed a more rigid criterion on all new start construction candidates. Final selection criterion required a benefit-cost ratio greater than unity at a 10 percent discount rate; and because the Fountain Creek project did not meet this criterion, it was not recommended for a new start in Fiscal Year 1987.

MONDAY, FEBRUARY 24, 1986.

SOUTHWESTERN DIVISION

WITNESSES

BRIG. GEN. JEROME B. HILMES, DIVISION ENGINEER

CHARLES P. RINGENBERG, JR., P.E., CHIEF, PROGRAM DEVELOPMENT OFFICE

GEORGE T. CARLSON, PROGRAM DEVELOPMENT OFFICE

LARRY W. DONOVAN, P.E., PROGRAM DEVELOPMENT OFFICE

ARTHUR D. DENYS, P.E., CHIEF, ENGINEERING DIVISION

BARRY G. ROUGHT, P.E., CHIEF, PLANNING DIVISION

AL P. HUTCHISON, P.E., CHIEF, CONSTRUCTION-OPERATIONS DIVISION

INTRODUCTION OF WITNESSES

Mr. BEVILL. The committee will come to order.

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Questions Submitted by Congressman Myers

FREEPORT HARBOR, TEXAS

Mr. MYERS. What is the condition of the jetty and entrance channel at Freeport Harbor?

General HILMES. Sir, the South Jetty continues to be maintained as necessary on an emergency basis. The North Jetty continues to deteriorate as maintenance is being deferred. The entrance channel is being maintained to project depth, 36 feet, by periodic dredging. The last dredging was performed in September 1985.

Mr. MYERS. Is the North Jetty any closer to failure than it was a year ago?

General HILMES. Yes, Sir. Only minimal maintenance is being performed on the North Jetty in anticipation of relcoating the jetty.

FOUNTAIN CREEK AT PUEBLO, COLORADO

Mr. MYERS. Is the Fountain Creek project ready for construction?

General HILMES. Sir, the project would be ready for initiation of construction approximately 6 months after receipt of construction funds. This time would be required to prepare plans and specifications for the first construction contract. The initiation of construction is also dependent upon project authorization and the signing of an acceptable Local Cooperation Agreement.

Mr. MYERS. What is your capability for 1987?

General HILMES. Sir, subject to the usual qualifications, our capability in fiscal year 1987 is $1,360,000 to initiate construction of the project.

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
WASHINGTON, DC 20310-0103

31 MAY 1985

Honorable Michael L. Strang
House of Representatives
Washington, D.C. 20515

Dear Congressman Strang:

You may be aware that earlier this year we submitted omnibus water resources legislation to the Congress and that Chairman Howard introduced this legislation (H.R. 1557), by request, on March 19, 1985. You may not have been aware that this is the first time any Administration has proposed this type of omnibus legislation or that the project for flood damage reduction at Pueblo in your District would be authorized if this bill is enacted into law.

Water resources legislation has been stalled for the last several years primarily because the Congress and the Administration could not work out their differences on cost sharing. The Fountain Creek project was included in our legislation because, after review in my office and by the Office of Management and Budget, it was found to be economically sound and consistent with current policies. With adoption of the cost sharing proposals contained in our legislation and acceptance by the project sponsor, there is no reason why this project cannot move expeditiously to construction, even in this time of great budgetary constraint.

If you have any questions on our proposal or on how the Fountain Creek project would be implemented under H.R. 1557, please do not hesitate to contact me. We are concerned with the lack of progress in solving our nation's water problems over the last ten years or so, and believe we can now move ahead.

Sincerely,

Robert K. Dawson
Acting Assistant Secretary of the Army
(Civil Works)

2 5 MAR 1985

Mr. Mike Salardino
President of the Council
City of Pueblo
P. O. Box 1427
Pueblo, Colorado 81002

Dear Mr. Salardino:

I want to bring you up to date on the status of our program for new construction starts by the Corps of Engineers.

The Fountain Creek Project, along with 28 others, is included in the President's budget for Fiscal Year 1986, in accordance with our agreement set forth in your letter of intent. The House and Senate Appropriations Subcommittees have held hearings on our budget; I am enclosing a copy of my budget testimony for your information.

We also submitted generic cost sharing legislation, introduced in the Senate as S. 534 and in the House as H.R. 1557, which contains some changes from our previous policies. However, your project is in the budget on the terms we originally negotiated.

Perhaps this will be the year when the stalemate of recent years will be erased, one way or another, and the Corps can proceed to build good projects, such as yours. We are certainly ready to do so.

I very much appreciate your participation in our efforts. If you need any further information from me, please let me know. Meanwhile, I am sure the District Engineer will keep you advised of developments.

Sincerely,

SIGNED

Robert K. Dawson
Acting Assistant Secretary of the Army
(Civil Works)

Enclosure

SUMMARY PAGE

PROJECT	REQUEST
Dolores Project (FY87)	$22,637,000 Construction Funds
Animas-La Plata Project (FY87)	$ 1,000,000 Construction Funds

STATEMENT OF CHRIS A. BAKER, CHAIRMAN
SOUTHERN UTE INDIAN TRIBE
BEFORE THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
April 15, 1986

Mr. Chairman and Members of the Committee:

I am Chris A. Baker, Chairman of the Southern Ute Indian Tribe. I am here to request funding for the Animas-La Plata Water Reclamation Project. This Project is extremely important to my Tribe. It represents not only an opportunity for us to develop our mineral resources on our reservation and create both employment and income, but further, it represents a cooperative effort on behalf of my people with the non-Indian members of the Four-Corners community in order to resolve very difficult questions pertaining to our reserved water rights.

In 1972, the Federal Government on behalf of the Southern Ute Indian Tribe and our neighbors, the Ute Mountain Ute Indian Tribe, commenced a legal action to ascertain our entitlement under the reserved water rights Winters Doctrine. No question remains as to whether we are entitled to water. The only question remaining is how much we are entitled to. We have repeatedly stated that we have been willing to negotiate the quantity of our claims through the vehicle of the Animas-La Plata Water Reclamation Project and that litigation is an option of last resort for our Tribe. Last month, as a culmination of our willingness to negotiate, we signed an Agreement in Principle with the state and the local water districts in order to quantify our claims. Both private developers and public entities, such as the City of Durango, although non-signatories to the Agreement, have made commitments to the Project. In my mind, this document represents a great breakthrough for the Indian tribes and our non-Indian neighbors.

Despite the justice of our claim for water and for development funds, it is unrealistic to believe that a new federal water project solely to benefit Indian tribes can be achieved within an acceptable time frame. The Animas-La Plata Project is the only area federal water storage project now authorized by Congress. This authorization was obtained only through the combined efforts of all groups in southwest Colorado. In today's economic climate, a project which serves the needs of only one group is unlikely to succeed.

The Animas-La Plata Project has been in the planning stages for over thirty years. Even a scaled-down water project will require years of time consuming design work, environmental impact statements, and political negotiations. By the time an alternative project could be designed and its details approved in all the appropriate places, its cost could equal the current cost of the Animas-La Plata Project. In addition, our engineers have advised us that because of economies of scale, the actual cost of water to the Tribe will be less under the Animas-La Plata Project than under a redesigned smaller project. Furthermore, funding and timely completion of water projects which serve only Indians have been chronically unsatisfactory.

In determining that the Animas-La Plata Project should be the keystone of the water rights negotiations, the Southern Ute Indian Tribe sought an approach which would be fair to all. In the negotiations process the Southern Ute Indian Tribe, along with the other interested parties, participated in a combined give-and-take in an attempt to reach a realistic settlement. We have felt a responsibility to consider the needs of our neighbors. We ask you to consider our needs. We are concerned with the impact upon the Tribe of the alternative strategies which have been proposed. If you truly believe we should have the water to which we are entitled, we ask your support for the Animas-La Plata Project.

Our claims will not only be for reserved water rights, but we are also contemplating whether there has been a breach of the trust relationship by the federal government. The Indian people, as you know, are dependent upon the federal government for many necessities. It is unfortunate that often our dealings with the federal government in the past have been inconclusive. Yet, we feel strongly enough in this water project and in the benefits to our entire community that we return to Congress and ask you to correct the wrongs we have suffered in regard to our water.

We have vast coal reserves on our reservation. Certainly in the development of our coal resources our Tribe will be concerned with maintaining the environmental integrity of our reservation. Our unemployment rate is traditionally high. We feel it is up to us to employ our tribal members, as well as make the best use of tribal lands. We want to treat our land as any landowner, but in order to do this we need the water which was impliedly reserved at the time the reservation was formed in order to make it an economically feasible place to live. Self-determination is a goal of all Indian tribes. The Animas-La Plata Project represents for us a step toward reaching that goal.

Additionally, the Indian people in southwest Colorado have traditionally enjoyed a good working relationship with all people in our community. The benefits of the Animas-La Plata Project are community-wide benefits. While we feel it is important to emphasize our Indian interests, it is also imperative that you understand we come here representing not only the Tribe, but also a wider focus of interest and concern. Some people who oppose the Animas-La Plata Project support Indian water claims. We've seen this to be false and patronizing. If the Animas-La Plata Project does not go, how much better will our neighbors be if only the Indian water is stored and delivered? How much better will our own life be in regard to our neighbors, if our own interests are the only ones which are attended to by Congress?

On previous occasions, we have pointed out the interminable delay which has plagued the building of the Animas-La Plata Project. It was authorized almost twenty years ago. It was authorized as a plan which was entered into over forty years ago. Our patience is not long. We have two generations of tribal members who could have prospered if our water had been in place and been delivered. Instead, these generations, including mine, are back here again before you to say "please, don't let this happen to the next generation." The promises which were made, it is now time to keep. We believe we have kept our promise of trying to be part of a larger community of interests. We hope that you will recognize our commitment and our dealing in good faith and treat us accordingly.

We appreciate the time, and further, we will appreciate your approval of a budget of $1,000,000 as requested by President Reagan for the initial construction phase of the Animas-La Plata Project.

Chris A. Baker, Chairman
Southern Ute Indian Tribe

STATEMENT OF FRANK E. (SAM) MAYNES
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES

WASHINGTON, D.C.
April 15, 1986

Good morning. My name is Sam Maynes. I am the attorney for the Southwestern Water Conservation District, as well as other water districts in our area. I am also general counsel for the Southern Ute Indian Tribe. The Animas-La Plata Project is important water project to come before this body in this century. It is important because it will store substantial amounts of water for municipalities in the Four Corners Area. The water that it will provide for agriculture and industrial development in our region will create long term economic benefits of lasting significance to Four Corners communities. Perhaps the greatest feature of the Project, however, is the fact that it will solve the Ute Indian water rights issue.

The Southern Ute and Ute Mountain Ute Indian Tribes have lived on tens of thousands of acres of land for which water has been unavailable. In fact, the Ute Mountain Ute Indian Tribe at Towaoc does not even have a domestic water supply and all of their drinking water must be trucked in. However, at the time these reservations were set aside by Congress, it was implied that water was reserved to these reservations to make the Indians' land economically feasible for them to live on it. These water rights have not been adjudicated and generations of Indians have suffered because of it.

Because the Animas-La Plata Project contains both Indian and non-Indian water rights, the parties which will be affected by the Indians' reserved water rights have been forced to talk, and talk very specifically, about what the Project would mean in regard to these rights. The resultant document, the "Agreement in Principle," is based on the premise that the Animas-La Plata Project will be built, and when that Project is built, there is an agreed water allocation which should allow both Indian and non-Indian water users to utilize the scarce water resources in the most beneficial way. Every party had to give up something in order to make this Agreement in Principle work. It was thought to be an impossibility that this Agreement would be signed, and yet it is now a reality, an historical document in terms of Indian water negotiation.

The Tribes have no doubt, nor should they, that if they go to court, the legal precedent is on their side to secure water rights for them. It is highly likely that if their water rights are adjudicated that many non-Indian water users will be unable to irrigate their otherwise fertile lands and their farms and ranches will be virtually valueless. The economic hardship and deprivation which would result to this area would be incalculable.

It is my understanding that the President has authorized $1,000,000 for a construction start in the F.Y.'87 budget on the Animas-La Plata Project. I suggest to you that because of the delays of the Animas-La Plata Project, almost twenty years, that this body cannot begin too soon to make an economic as well as a moral commitment to the Animas-La Plata Project.

I have appreciated your courtesy and kindness to my district and to other water users in southwest Colorado on whose behalf our delegation appears. We need, however, a firm long-term commitment and not just a one-year commitment to the Animas-La Plata Project. It will solve most of our water problems, and it will help us reach almost all of our goals. This is a project which cannot be completed without assistance from this government, and while I know this is a tight budget year, if the Project is not built, and when the Indian water rights are adjudicated, the economic deprivations to this part of the state will cost far more in social services, litigation, and economic depression than the Animas-La Plata.

Thank you for your assistance.

Frank E. (Sam) Maynes

STATEMENT OF JOHN MURPHY
PRESIDENT OF THE BOARD OF DIRECTORS
ANIMAS-LA PLATA WATER CONSERVANCY DISTRICT
BEFORE THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
April 15, 1986

I am John Murphy, President of the Animas-La Plata Water Conservancy District. As the District name implies, my organization was formed in order to develop the Animas-La Plata Water Project. It is important, however, to point out that as a native of the Durango area, the dream of this Project did not start with me, or even my generation. I grew up out on the "Dryside." Farmers and ranchers in the area have been talking about diversions from the Animas River for as long as I can remember, and that's more than half a century!

Much has been said today about the Agreement in Principle entered into by the Tribes, the states of Colorado and New Mexico and local water districts, including my water conservancy district. I will not belabor the point, but this document does represent a tremendous community effort, and beyond that, a statewide effort to determine how the Project should be built, and how our Indian neighbors should be treated. We have been very fortunate to deal with tribes who are enlightened and caring, and who have set aside some of their claims in order to promote the good of the community as a whole.

The value of the Project, while it is readily apparent to those of us who live in Colorado, may not be known to you. Therefore, I would like to take a moment to review what this Project will mean to the people in our corner of southwest Colorado. In short, the Project will supply industrial water to both the Southern Ute and Ute Mountain Ute Indian Tribes to enable them to develop their reservations into true homelands. The Project will enable the family farmer, truly an endangered species to continue to exist in southwest Colorado, and the Project will provide a reliable municipal water supply for our area's increasing population.

The Animas-La Plata Project will supply 26,500 acre-feet of industrial water to the Southern Ute Indian Tribe. On the more than 300,000 acres of Southern Ute Indian Reservation, it is estimated that there is between 116,000,000 to 400,000,000 tons of high-grade coal on the surface or just below the surface of the reservation, and over 8,000,000,000 tons of coal in the deeper regions. It is what is known as clean coal. If the Tribe were to mine this exceedingly valuable resource with Project water, it is likely that this development would enhance both the Tribe's economic well-being and assist the Tribe to reach its goals of independence and self-determination.

The Ute Mountain Ute Indian Tribe, while it does not have such extensive coal resources, still has enough coal that the 6,000 acre-feet of industrial water allocated to the Tribe from the Animas-La Plata Project would help provide a mining operation which could employ between 25 and 45 people. Both Tribes suffer from high unemployment. It would be in all of our interests to assure that the Tribes have an opportunity to develop the resources on their reservations.

Under the Animas-La Plata Project, Colorado is allocated 100,000 acre-feet of water for irrigation. Part of this will go to both Indian tribes and 72,900 acre-feet is designated to go to the Animas-La Plata Water Conservancy District. The irrigation problems in our area are legendary. The rainfall is sparse and sporadic. As recently as the last decade, we suffered a tremendous drought which underscored the need for a reliable source of water. The land to be served by this irrigation water has been classified by the Soil Conservation District as having one of the most productive types of soil. The farmers who use this water are committed to pay their share of the costs of the water. In this area where agriculture has always been a very difficult business, the construction of the Animas-La Plata Project will assure that the family farmer can continue as a valuable member of the local community, and can continue profitably.

Additionally, the municipal and industrial acre-footage of water for Colorado from the Project is 41,700 acre-feet. The Durango area will receive approximately 9,200 acre-feet of water. As in the rest of Colorado, Durango and La Plata County have increased in population over the last decade. The growth is continuing. The need for an increased water supply has been recognized by everyone from the City of Durango's water engineers, Black & Veatch, to the outlying water providers, such as the South Durango Water District.

The cost-sharing portion of the Project is especially important because it represents the first time, to my knowledge, that the governments of two states have participated with the federal government and local water and municipal entities to assure the building of a water project. Water projects are traditionally government sponsored projects because of their capital intensive character. Private enterprise could not build this project. This does not make the project less worthwhile or less needed. In fact, the public nature of this enterprise only serves to emphasize the important role of continued federal support in order to achieve regional economic health.

I was pleased to note that the President had allocated $1,000,000 in his budget for the Animas-La Plata Project. This is a milestone. It is the first time that the Administration has budgeted construction funds for the Animas-La Plata.

This Project has been delayed for many reasons. The intent of Congress when it put together its package of development projects along the Colorado River drainage, was that the Animas-La Plata Project would be built concurrently with the Central Arizona Project. This obviously has not occurred. The Central Arizona Project is now almost completed. The fact that the Central Arizona Project is now in its last phase gives rise to the inescapable conclusion that there should be more money available for the Animas-La Plata Project.

Do not think that we are insensitive in our small part of the world to the needs for budgetary restraint by the federal government, but the money which you will spend on this Project will be repaid in many ways. First, repayment contracts will be entered into for the municipal and irrigation portions of the water for the non-Indian users. Second, this Agreement will avoid the cost of protracted litigation by the two Tribes to secure their reserved water rights and the cost of damages to the Tribes for the breach of the federal trust responsibility. I cannot help but feel that the Federal Government has breached its trust responsibility to the Indians not only in past history, but also in recent history with regard to their water rights. For example, along the Mancos River where the Ute Mountain Utes clearly have sufficient claims to take almost the entire flow of water, not only did the government allow prior appropriations so that the water was diverted to private users, but the Government also built a water project along the river and committed the water to non-Indians. If the Indians had chosen to litigate the issue of reserved rights claims, an exercise which will not be necessary if the Animas-La Plata Project is built, the Federal Government would be subject to a potentially major damage action, and the non-Indian water users who also relied on their Government would be severely hurt. It is unfortunate that we must come to Congress in order to assure that those promises which were made to the Indian people are kept. It is in the interest of all people in southwest Colorado that the Indians be treated fairly and equitably.

The Animas-La Plata Project represents a unique opportunity to reinforce the goodwill which neighbors of all races have enjoyed in southwest Colorado. We have approached the problem of water scarcity and the need for a water storage project on a community-wide basis. In this effort we have been aided by the State of Colorado, and a genuine statewide interest has been created in this Project exists. Further, the state and citizens of New Mexico have assisted us on a regional problem which does not stop at our borders.

I have a personal belief in this regional settlement. I know that you also have a commitment to a harmonious solution to both the geologic and historic problems of our area. I thank you for your time, and I would appreciate your careful consideration of budgeting $1,000,000 for the Animas-La Plata Project for construction to start in F.Y. '87.

John E. Murphy, President
Animas-La Plata Water
Conservancy District

STATEMENT OF ANN BROWN, MAYOR
CITY OF DURANGO
BEFORE THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
April 15, 1986

Mr. Chairman and Members of the Committee:

Thank you for meeting with us.

I know that you are exceedingly busy. I am Ann Brown, Mayor of the city of Durango, Colorado, located in La Plata County.

Our municipality is scheduled to receive 2,500 acre-feet of water from the Animas-La Plata Project. I am a supporter of the Animas-La Plata Project. An independent study performed by water engineers, Black & Veatch, recommended City participation in the Animas-La Plata Project to meet the next generation's water needs in preference to the development of alternative sources of water. A significant conclusion of the study was that the Animas-La Plata's economic impact would be far-reaching and of benefit to the entire Four-Corners Region. Additionally, it has been demonstrated that if the Southern Ute Indian Tribe's reserved rights claims on the Florida River were granted through litigation, Durango's municipal water supply would be severely impaired. There is even a possibility that there would be inadequate water to meet our basic needs in the summer if the Tribe's water rights need to be adjudicated.

The City of Durango, therefore, needs the Animas-La Plata Project. It is a project which will meet our municipal water requirements for decades to come. The City of Durango is not unmindful of our interdependence on other entities within the County and, in fact, with other towns and businesses across state lines in New Mexico. Because of our remote location, the mountains to the north and undeveloped reservation lands to the south, we tend to rely quite heavily on the goodwill of all of our neighbors. Among these neighbors, with whom we most need to work, are the Ute Mountain Ute and Southern Ute Indian Tribes. I was afforded a unique opportunity to be an integral part of the negotiations which led to the historic Agreement in Principle. I was made chairwoman of the meetings which occurred throughout 1985 and early 1986. Because I was a part of these negotiations, I was allowed to view the sacrifices and commitments which were made on all sides in order to further the progress of the Animas-La Plata Project. I had the sense when we first began that the Administrative people did not feel that we could reach a successful conclusion. The Agreement itself represents not only our good faith and trust in our neighbors, but also illustrates the concept that the needs of the group as a whole must supercede individual needs and individual claims.

The Animas-La Plata Project must be built if we are to avoid a costly court battle over the reserved Indian water rights. It is imperative that this august body recognize that the entire economic and social fabric of this area will be irreparably torn if the Indian water rights case goes to court, and if those reserved rights supercede the prior appropriation water on which our entire agricultural community depends. It is not the intent of our Indian neighbors to undermine the agricultural community, but who can blame the Tribes in protecting their own rights. Therefore, it is doubly important that the Animas-La Plata Project be awarded construction funding for F.Y.'87. It is, first, important because of the intrinsic worth of the Project itself. It is secondly important because it represents our only opportunity for peaceful negotiation of an extremely damaging issue: reserved Indian water rights.

I was reared in the part of Colorado which is to be benefitted by the Dolores Water Project. I can already see the change in the people in that area in terms of their anticipation, and their commitment to the future of their community. I can only assume that that same enthusiasm will be attendant upon the Animas-La Plata Project.

Unless we in southwest Colorado are able to secure an economic base that is not dependent on outside forces, we will never be able to secure our future or that of our children. The development of the Indian coal and mineral reserves on the reservation will mean self-determination for the local Tribes. This should not over-shadow the need for the economic self-determination for all citizens of this very isolated corner of the state. I request that you please give careful consideration to allocating $1,000,000 in F.Y.'87 for construction of the Animas-La Plata Project.

Thank you so much for your time.

Ann Brown, Mayor
City of Durango

STATEMENT OF DORIS BRENNAN, CHAIRMAN
LA PLATA COUNTY BOARD OF COUNTY COMMISSIONERS
BEFORE THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
April 15, 1986

I am Doris Brennan, Chairman of the La Plata County Board of County Commissioners. Our county encompasses most of the area which will be served by the Animas-La Plata Project. We in the County view this Project as the key factor to the future economic well-being of La Plata County. We are a small area. The City of Durango has a population of approximately 14,000, and La Plata County contains 35,000 people. There has been great growth over the last decade. However, much of that growth comes from new residents who have decided to retire here. While we welcome all new residents and conscientious citizens, we need to assure that there is some intrinsic economic growth from within the community rather than dependence upon outside money or an influx of population.

While opponents of the Project would have you believe that La Plata County will grow in an uncontrolled manner because of the water project, that quite simply is not true. As a La Plata County Commissioner, I am aware that in our County it is not the developers who need water but the farmers. The developers have the wherewithal to buy water or augment it. Project water, such as that which will be developed through the Animas-La Plata Project, will be tied directly to agriculture and will help us to assure that the backbone of this County, which is the small family farm, will continue. To our great dismay we have seen many of our friends lose their farms because of the poor economic times, particularly for the dryland farmers who have no consistent water supply. They are not facing economic hard times because they have purchased big equipment at high rates of interest, or because they have been land greedy. In fact, most of these ranchers and farmers are descendants of homesteaders and have done nothing more than show a loyalty to a way of life which cannot continue to exist unless they have a constant supply of irrigation water.

I have grown up and spent all my life in La Plata County. I have seen the cyclical nature of the economy in this corner of Colorado. If we had the Animas-La Plata Project to generate a sound basis for agriculture and provide additional recreational opportunities, it is my opinion that the economy of La Plata County would become more stable and less subject to the whim of outside forces.

As a politician, I am very aware of what people in my district are thinking. I know there has been some opposition to this Project, and some of it has been quite vociferous, but the majority of the people are concerned about storing our water for municipal and industrial, as well as agricultural, uses. Many people who originally opposed the Project have reversed their position, because of the widespread economic benefit which will emanate from the construction of this water storage project. We are proud of what has been accomplished in the Agreement in Principle. To us it is one more example of people's willingness to sacrifice so that a project which will benefit this entire community can be built. I am hopeful that this body will continue to give us its support. I reaffirm my colleagues in requesting a $1,000,000 budget allocation for the construction of the Animas-La Plata Project in F.Y.'87, and I wish to assure you that my two colleagues on the Board of County Commissioners echo my heartfelt and unqualified support for this Project.

Doris Brennan, Chairman
Board of County Commissioners
La Plata County, Colorado

STATEMENT OF PAT GREER
ANIMAS-LA PLATA WATER CONSERVANCY DISTRICT
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
April 15, 1986

I am Pat Greer. I am a farmer around the "Dryside," and I am here today on behalf not only the Animas-La Plata Water Conservancy District, but also all dryland farmers in our area who will receive irrigation water from the Animas-La Plata Project. Unlike many federal undertakings, water projects are not limited to supplying a capital-intensive improvement, in addition, they ensure that those who receive the benefits share in the repayment. I am more than eager to assist in any such reimbursement of cost in order to bring into long-awaited reality the Animas-La Plata Project.

As a farmer, I have spent many years planting crops and watching them grow, and ultimately blow away in dust, because I have not had a confirmed, dependable source of irrigation. My land is both partially irrigated and dryland. The irrigated portion is the most frustrating to deal with because the water source is undependable and water delivery is sporadic. However, I do not complain. This is a way of life that I have chosen. However, I can see that there is great opportunity for those who have water storage from which to dip into at those crucial moments. The Animas River has never had a shortage in the history of quantifying its water rights. The Animas River is a water drain whose excess water could be used to the benefit of people who live over the ridge from it. I am one of those persons. The La Plata River, our source, runs dry every year. Additionally, the La Plata River is subject to an interstate compact which was formulated during unseasonably wet seasons. Therefore, the Colorado commitment for water delivery on the La Plata River has never been realistic. The Animas-La Plata Project will help rectify this very terrible imbalance. Our neighbors to the south in New Mexico suffer as much as we do from the sporadic water supply.

We have joined hands and erased our previous differences in the hope that a show of solid support for the Animas-La Plata Project will convince you not only of our great need for it, but also of a community resolve to assure you that this Project and this water will be paid for.

It is my understanding that the President's budget contains $1,000,000 for construction start of the Animas-La Plata Project in F.Y.'87. This Project has been unduly delayed, in fact, now for almost twenty years from the date of its first authorization in 1968. Colorado River water development projects were authorized to occur simultaneously. So it is seen as crucial in our eyes, given the extent of development of the Central Arizona Project, that the Animas-La Plata Project be proceeded with all due haste.

We appreciate your consideration of our request and would appreciate even more your actual recommendation that the F.Y.'87 budget contain $1,000,000 for the Animas-La Plata Project. Thank you.

Pat Greer, Director
Animas-La Plata Water
Conservancy District

STATEMENT OF JOHN PORTER, MANAGER
DOLORES WATER CONSERVANCY DISTRICT
BEFORE THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
April 15, 1986

Introduction

I am John Porter, Manager of the Dolores Water Conservancy District. Until my employment with the District, I was a rancher in southwestern Colorado. Since the storage and distribution of water is the lifeblood of our economic existence in the west, I have been involved in various responsibilities having to do with water distribution and development all of my adult life.

The District is the operating entity for the Dolores River Reclamation Project. That Project is just now coming into fruition. For the first time ever, the City of Cortez and the Montezuma Valley Irrigation Company now do not have to worry about a summer water shortage. In addition to providing supplemental water to these two entities, the Project will provide a full supply of water to the towns of Dove Creek and Towaoc, to 28,000 acres owned by 170 landowners in portions of Montezuma and Dolores Counties, to 7,500 acres of land on the Ute Mountain Ute Indian Reservation, to a minimum stream flow release below McPhee Dam thus enabling a "blue ribbon fishery" to be established, and to the recreation use on the 5,000 acre McPhee Reservoir. The McPhee Recreation Area is to be officially opened May 24, 1986, to anxiously awaiting Four Corners States fishermen, boaters, and picnickers.

Summary of Requests

DOLORES PROJECT $ 22,637,000

The President has requested 22.6 million dollars for FY 87 for the Dolores Project.

We recommend that amount be appropriated.

ANIMAS-LA PLATA PROJECT

Subject to a cost-sharing arrangement being in place, the President has requested one million dollars.

We strongly urge that amount be appropriated.

Statement

Mr. Chairman, on behalf of all of the supporters, users, and friends of the Dolores Project, I want to thank you for your dedication to and support of this Project. It is a great thrill to watch McPhee Reservoir fill, and to know that those waters are now available for the first time ever to the river's constituency for the many, many uses and demands that will be placed upon it. We sincerely are grateful to you and this committee for the major role you have played in that accomplishment.

The Dolores Project has had a remarkable consistent history of efficiently using all of the money appropriated to it. It is on schedule. I would caution that any reduction in the level of funding below the President's recommended budget would jeopardize the planning and design efforts, which would curtail the smooth momentum of construction that will see that Project finished by 1993.

I am a member of the Board of Directors of the Colorado Water Resources and Power Development Authority. From that perspective I can testify to you the urgency that all of Colorado feels for the start of construction of the Animas-La Plata Project. Particularly now that the Colorado Ute Indian reserved water rights and the cost-sharing plan have been combined into one agreement, the "Agreement in Principle."

It has always been the unwritten understanding that the 22,900 acre-feet of agricultural water the Ute Mountain Ute Indian Tribe is to receive from the Dolores Project was in lieu of their Winters claim to the Mancos River. By virtue of the "Agreement in Principle," we all, including the Federal Government, now have the opportunity to not only implement that unwritten understanding, but solve a host of other problems as well.

All of the participants to the negotiation of the "Agreement in Principle," and I know you are aware of that varied group, are convinced that their effort was a monumental one, that its culmination was miraculous, and that the fruits of its implementation will be untold. What we are not aware of, and I hope and pray we don't have to experience, is the colossal consequences if the Animas-La Plata is not constructed and that negotiation goes for naught.

Conclusion

Therefore, Mr. Chairman, I urge you and this Committee to not only continue funding the Dolores Project at its recommended level, but I plead with you to use the good auspices of your position to move the Animas-La Plata forward to a "new start."

I truly thank you for your time and consideration.

John Porter, Manager
Dolores Water Conservancy District

#8

LIST OF WITNESSES
BEFORE THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
April 15, 1986

PROJECTS INVOLVED:
- Dolores Water Reclamation Project
- Animas-La Plata Water Reclamation Project

PROJECT SPONSORS:
- Southwestern Water Conservation District of Colorado
- Animas-La Plata Water Conservancy District
- Dolores Water Conservancy District
- Southern Ute Indian Tribe
- Ute Mountain Ute Indian Tribe
- San Juan County, New Mexico
- La Plata County, Colorado
- City of Farmington, New Mexico

REPRESENTATIVES IN PERSON OR BY STATEMENT:
- Fred V. Kroeger, President, Southwestern Water Conservation District of Colorado; Director, Animas-La Plata Water Conservancy District
- Frank E. (Sam) Maynes, Attorney for Southwestern Water Conservation District of Colorado; Attorney for Southern Ute Indian Tribe of Ignacio, Colorado; Attorney for Dolores Water Conservancy District
- Chris A. Baker, Chairman, Southern Ute Indian Tribe, Ignacio, Colorado
- Leonard C. Burch, Member Southern Ute Indian Tribal Council, Former Chairman, Southern Ute Indian Tribe
- Alton R. Nordwall, Superintendent, Bureau of Indian Affairs, Southern Ute Agency, Ignacio, Colorado
- Vida Peabody, Southern Ute Indian Tribal Council Member
- Guy Pinnecoose, Jr., Southern Ute Indian Tribal Council Member
- Edward Box, Sr., Southern Ute Indian Tribal Council Member
- Lillian Seibel, Southern Ute Indian Tribal Council Member
- Thomas H. Shipps, Attorney for Southern Ute Indian Tribe
- John E. Murphy, President, Animas-La Plata Water Conservancy District Board of Directors
- Robert E. DeNier, Director, Animas-La Plata Water Conservancy District Board
- John T. Porter, Manager, Dolores Water Conservancy District Board
- David Herrick, Director, Dolores Water Conservancy District Board
- Doris Brennan, La Plata County, Colorado Commissioner
- Ann Brown, Mayor, City of Durango, Colorado
- J. Pat Greer, Director, La Plata Water Conservancy District Board Director, Animas La Plata District Board of Directors
- Tom Taylor, Mayor, City of Farmington, Farmington, New Mexico
- William Manchester, Farmington City Council Member
- Manuel Hastings, Farmington City Council Member
- Dwight Arthur, Attorney for City of Farmington
- Honorable Ray Kogovsek, Former Colorado Representative, U.S. House of Representatives

—ERNEST HOUSE, ANIMAS-LaPLATA PROJECT
J. WILLIAM McDONALD,
DIR., COLO WATER CONSERVATION BOARD

PLEASE FILL IN

Name: Michael Occhiato

Position: Pres. (Mayor) Pueblo City Council

Organization: Pueblo City Council
Pueblo, Colorado

*** IF YOU HAVE A WRITTEN STATEMENT OR OTHER INFORMATION FOR THE RECORD, PLEASE GIVE TO THE REPORTER AT THE CONCLUSION OF YOUR TESTIMONY

Mr. STRANG. On the Fountain Creek Project, both Houses of Congress have now approved their respective versions of the Water Resource Development Act, H.R. 6, and S. 1567, a conference is pending. This flood control project in Pueblo, Colorado is included in both authorizing bills, and we are asking the committee to provide funds for initial construction in fiscal year 1987.

I urge the committee to help protect life and property from disastrous flooding that struck the people of Pueblo in years past, by requesting that you allocate $1.36 million for initial construction of the Fountain Creek Flood Control Project in fiscal year 1987.

Now, we will start off with the Animas-La Plata Project, and who is going to speak? First, the Chairman of the Ute Mountain Indian Tribe, Ernest House.

Mr. HOUSE. Mr. Chairman, it is a privilege to be here before your committee. I am the Chairman for the Ute Indian Tribe. I am here to ask for your support on construction of the Animas-La Plata Project, and also the Dolores Project. All of us here have reached agreement, which the Congressman has mentioned. We have all worked to come up with an agreement, an agreement of understanding, an agreement of love, an agreement of friendship, and I think we have demonstrated that here before you this afternoon by our appearance.

I would like to ask the committee to look at this agreement and see what it is. Again, to make my statement short, I thank you for this time. It was an honor to have you in Cortez and we wish you could come back and visit again.

Thank you.

Mr. BEVILL. Very good.

Mr. STRANG. Next, Chairman Chris Baker of the Southern Utes Tribe.

Mr. BAKER. It is good to see you again, Mr. Chairman.

I am Chris A. Baker, Chairman of the Southern Ute Indian Tribe. As Mr. House has pointed out, we have worked on this agreement for years and years and many times, we have been faced with frustration and we are just trying to do the best we can to make this project, Animas-La Plata Project, a reality.

It has not been too long ago that we finalized an agreement that we all signed off on, we all agreed on and we feel that this agreement in principle will take care of many of our problems down in our area, the southwest corner of Colorado, and northern New Mexico.

Not only the two tribes have been a party to this, but many of our neighbors, non-Indians around there, different towns both in Colorado and in New Mexico, also the State of New Mexico and the State of Colorado.

So we feel that our water problems will be taken care of to a great degree through this agreement.

We urge that the amount of $1 million be appropriated to begin construction of the Animas-La Plata Project. We sincerely hope that this can be done, and we thank you, Mr. Chairman, and the committee, for allowing us to appear.

Mr. STRANG. Mr. Chairman, John Murphy will now talk.

Mr. MURPHY. Mr. Chairman and members of the committee, I want to join Congressman Strang in thanking you for taking the time to come out and visit our projects out there. We certainly enjoyed the visit of you and your lovely wife.

As you know, I am John Murphy, President of the Water Conservancy District. As the name implies, my organization was formed in order to develop the Animas-La Plata Water Project. It is important, however, to point out that in the Durango Area, agreement on this project did not start with me or even my generation. I grew up on a farm near the city called the "Dryside." This area in Colorado is the area that will receive the irrigation water from this project.

Farmers and ranchers in the area have been talking about diversion from the Animas River for as long as I can remember, and that is over a half century. Much has been said about the project, including my water conservancy district. This document represents a tremendous community effort and beyond that, a state-wide effort to determine how the project should be built and how the natives should be treated.

We have been very fortunate to deal with tribes who are enlightened and caring and who have set aside some of their claims in order to promote the good of the community as a whole.

The value of the project, while it is readily apparent to those of us who live in Colorado, may not be known to you. Therefore, I would like to take a moment to review what this project will mean to the people in our corner of southwest Colorado. In short, the project will supply industrial water to both the Southern Ute and Ute Mountain Indian Tribes to enable them to develop their reservations into true homelands. The project will enable the family farmer, truly an endangered species, to continue to exist in southwest Colorado, and the project will provide a reliable municipal water supply for our area's increasing population.

The Animas-La Plata Project will supply 26,500 acre feet of industrial water to the Southern Ute Indian Tribe. On the more than 300,000 acres of Southern Ute Indian Reservation, it is estimated that there is between 115,000,000 and 400,000,000 tons of high grade coal on the surface or just below the surface of the reservation, and over 8,000,000,000 tons of coal in the deeper regions.

It is what is known as clean coal. If the Tribe were to mine this exceedingly valuable resource with project water, it is likely that this development would enhance both the Tribe's economic well-being and assist the Tribe to reach its goals of independence and self-determination.

The agreement incorporates an allocation of scarce water resources which will provide both Indian and non-Indian water users with the water necessary for their economic development. This negotiated settlement obviates the need for the two tribes to litigate settlement of their water claims.

If there is a court adjudicated settlement of the water rights, it is likely that many non-Indian farmers and ranchers will be unable to irrigate their otherwise fertile fields. Devastating economic hardship would result in the Four Corners area.

We appreciate the President's request of $1 million in fiscal year 1987 to begin construction of the project. We urge your support not only for the 1987 construction fund, but for completion of the project. We ask you to make a commitment to provide the Southern Ute and Ute Mountain Ute Indian Tribes with water to make their reservations true homelands without drastically impairing the water rights of the Tribe's non-Indian neighbors.

We have lived together all of our lives. We would like to continue to do so. The Animal-La Plata is a project whose time has come. Thank you very much for your assistance.

Mr. **Porter**. I am John Porter, manager of the Water District. We really enjoyed your visit and are very honored. I am in the enviable position of being able to thank you for funds that you have provided and for a project that is coming into fruition. It is a thrill, and I am sure you felt that thrill of the people who this summer for the first time, the City of Cortez and the supplemental lands under that project do not have to fear a water shortage.

So, just briefly, there are two things I would like to mention. One is that we agree with the President's request for $22.6 million for ongoing construction of the Dolores project. Number two, with this agreement, in principle, for the first time the Dolores is an integral part of the Animas-La Plata and that settlement. It has been understood over the years that the water the Indians receive out of the Dolores project is in lieu of their claim to that Mangus River, which was theirs, and I don't think anybody argues about that.

If they took it, it would dry up a lot of non-Indian farms. They have been so very good by mitigating those kinds of mitigations. So we are a part of that Animas-La Plata project, we have a vital interest in it, and we would like to see that go forward and urge you to do what you can toward that end.

Thank you, Mr. Chairman.

Mr. **Strang**. We are honored to have the Mayor of Farmington, New Mexico, the Honorable Thomas Taylor.

Mr. **Taylor**. Thank you for the opportunity to testify. The City of Farmington feels this is not only a very historical accomplishment that has gone on concerning the Animas-La Plata project, but that it is very unique. There have been a tremendous amount of problems in the past, problems of water rights between Colorado and New Mexico, and more importantly, the source of the water dispute between the two tribes, the Ute Indians and the State of Colorado and Federal Government.

I think it is important that the two states, two Indian tribes are together in this, they have shared in the cost sharing in this, and we have all developed ways we can handle our portion of that.

In San Juan County, where I am from, I might mention San Juan County is about the size of the State of Connecticut. We have about 70 percent of the fresh water in New Mexico running through our corner of the state, and I say that because most of it runs right through, and we don't want to see too much more of it going downstream than necessary.

Mr. **Strang**. The chairman and I looked at it in a helicopter.

Mr. **Bevill**. You must be paying the preacher pretty well with all that water running through.

Mr. **Taylor**. We believe it solves that problem. We feel that the settlement with the Indians, the cost sharing and everything else is something that should be looked on favorably by the government. We have all worked very much together on this thing to see it go through. The Animas-La Plata is extremely important to us from the standpoint of economics in the Four Corners area.

In conjunction with the Navajo irrigation project, this and the Dolores project, we are looking at about 300,000 acres of irrigated land in the Four Corners area that will certainly have an economic benefit for us. Our community is very much tied to oil and gas. We would like to see a broader base for economic dependence, and this is one way of doing it.

We appreciate your consideration and the funding of $1 million this year for the Animas-La Plata project.

[The statement of the City of Farmington follows:]

STATEMENT OF THE CITY OF FARMINGTON, NEW MEXICO TO THE ENERGY AND WATER DEVELOPMENT SUB-COMMITTEE OF THE U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON APPROPRIATIONS.

APRIL 11, 1986

SUMMARY

The City of Farmington requests construction funding for the Animas La Plata Reclamation Project in Southern Colorado to be included in the 1987 fiscal year appropriations in the sum of not less than One Million Dollars ($1,000,000).

STATEMENT

For the past year, all the non-federal entities involved in the Animas La Plata Project have diligently striven to comply with the requirements in the 1986 FY Appropriation Act. That act required that a cost sharing agreement be reached with the Secretary of Interior on this project by June 30, 1986 as a condition to the use of the 86 FY. appropriation. The negotiations with the Secretary of the Interior were not fruitful. However, the States and the local entities continued a diligent effort and they were successful in reaching an agreement among themselves concerning many complex legal equitable and cost sharing issues tied in the Animas La Plata project. Those issues included Indian water rights settlement, sharing the use of various sources of water in New Mexico and cost sharing. These issues were difficult and complex, but we were successful.

On March 27, 1986 Senators Dominici, of New Mexico, and

Armstrong, of Colorado, delivered the proposed settlement of all Indian water rights and water issues including the cost sharing proposal to Secretary Hodel. That settlement and the proposal was prepared and signed by the States of Colorado and New Mexico, the local entities in both States, and the two Indian Tribes. The scope of the agreement included many crucial subjects. There are long lasting effects that will be of great benefit to the United States as well as a benefit to the parties.

The two Indian Tribes, the State of Colorado, and all affected Colorado water users have negotiated the settlement of the Indian water rights in at least seven different rivers and have obtained significant cost sharing contributions from each of the parties in Colorado.

The State of New Mexico has assisted the local entities in New Mexico to reach an agreement on the funding of the cost sharing obligation through local tax levies and other considerations, including the creation of the San Juan Water Commission, the sharing of the use of the water from their project and other sources among all affected water using organizations in New Mexico.

These agreements have been hard to achieve. Everybody has reached deep into their resources and have given up important rights and foregone significant benefits in order to achieve the agreement, with the cost sharing, as offered to the Secretary of Interior. Wide spread support has been expressed for the acceptance of the proposal some of which are attached hereto.

We believe that this good faith effort should be sufficient to justify proceeding with the funding for FY 1987 in order to avoid losing the benefit of these hard won agreements. The United States and these parties supporting the Animas La Plata project will never again have the same opportunity to solve these important issues on such a favorable basis, and also be able to achieve that significant amount of cost sharing that is provided by each of the States and the local entities.

THIS IS A UNIQUE SITUATION, THE SOLUTION TO WHICH REQUIRES YOUR SUPPORT.

Respectfully submitted,

Thomas Taylor, Mayor
City of Farmington, New Mexico

NEW MEXICO INTERSTATE STREAM COMMISSION

COMMISSIONERS

[redacted]
S. E. REYNOLDS, Secretary, Santa Fe
ALBERT E. UTTON, Albuquerque
J. PHELPS WHITE III, Roswell
GEORGE BRANTLEY, Carlsbad
WOODROW O. GARY, Hatch
GROVE BURNETT, Vallecitos
ANN RISHER, Farmington
M. H. SALMON, San Lorenzo
Tracy Siedman, Wagon Mound

BATAAN MEMORIAL BUILDING
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

April 9, 1986

New Mexico Members
Animas-La Plata Project
 Strategy Group

Dear New Mexico Members:

Herewith for your information is a copy of the resolution on the Animas-La Plata Project adopted by the Upper Colorado River Commission at its April 2, 1986, meeting in Salt Lake City, Utah.

Best regards,

Sincerely,

Steve

S. E. Reynolds
Secretary

SER:pt
cc: Harold Ranquist

c W. Manchester
D. Arthur

APR 10 1986
LEGAL DEPT.

RECEIVED
APR 10 1986
CITY OF FARMINGTON
ADMINISTRATION

UPPER COLORADO RIVER COMMISSION

355 South Fourth East Street
Salt Lake City, Utah 84111

April 7, 1986

MEMORANDUM

TO: Upper Colorado River Commissioners and Advisers

FROM: Gerald R. Zimmerman, Executive Director

SUBJECT: Resolution Regarding Construction of the Animas-La Plata Participating Project.

During its Adjourned Regular Meeting on April 2, 1986, the Upper Colorado River Commission adopted a resolution "Regarding the construction of the Animas-La Plata Participating Project." As resolved, I transmitted copies of the resolution to the Secretary of the Interior, the congressional delegations of the Upper Division States, and other Federal and State Officials on April 3, 1986.

Enclosed for your reference and files are copies of the transmittal letter to the Secretary of the Department of the Interior and the Resolution of the Upper Colorado River Commission Re: Construction of Animas-La Plata Participating Project.

UPPER COLORADO RIVER COMMISSION
355 South Fourth East Street
Salt Lake City, Utah 84111

April 3, 1986

Hon. Donald Paul Hodel
Secretary
Department of the Interior
Interior Building
Washington, D. C. 20240

Dear Secretary Hodel:

During its Adjourned Regular Meeting on April 2, 1986 in Salt Lake City, Utah, the Upper Colorado River Commission adopted the enclosed resolution and directed me to transmit a certified copy of it to you.

As you will note, this resolution strongly urges the Secretary of the Interior to approve the non-Federal up-front/cost sharing proposal which has been agreed to in principle and enter into the required contract by June 30, 1986.

Very truly yours,

Gerald R. Zimmerman

Gerald R. Zimmerman
Executive Director

GRZ:hiw

Enclosure

RESOLUTION
of
UPPER COLORADO RIVER COMMISSION

Re: Construction of Animas-La Plata Participating Project

WHEREAS, the Animas-La Plata Project is a participating project of the Colorado River Storage Project; and

WHEREAS, the Secretary of the Interior was directed "to proceed as nearly as practicable with the construction of the Animas-La Plata [Project] . . . concurrently with the construction of the Central Arizona Project to the end that such project shall be completed not later than the date of the first delivery of water from said Central Arizona Project . . . ."; and

WHEREAS, the first delivery of water to the Central Arizona Project has already been made but construction has not yet started on the Animas-La Plata Project; and

WHEREAS, in 1985 the United States Congress appropriated $1 million for a construction start on the Animas-La Plata Project contingent upon non-federal interests entering into a reasonable up-front financing/cost-sharing agreement with the Secretary of the Interior by June 30, 1986; and

WHEREAS, the United States Departments of the Interior and of Justice subsequently required that an up-front financing/cost-sharing arrangement for the project be taken up as a part of the settlement negotiations which the State of Colorado had initiated with the Ute Mountain Ute and Southern Ute Indian Tribes concerning the tribes' reserved water rights claims in Colorado; and

WHEREAS, an "Agreement in Principle on the Settlement of Colorado Ute Tribes Reserved Water Rights" was entered into on March 14, 1986, by the State of Colorado, the two tribes, and five Colorado water conservancy and conservation districts, which Agreement includes a non-federal up-front financing/cost-sharing proposal; and

WHEREAS, the said proposal is responsive in all regards to the parameters for non-federal financing and cost-sharing set forth in President Reagan's January 24, 1984, letter to Senator Paul Laxalt and meets or exceeds the percentage contributions required of non-federal interests for other federal water resources projects and Indian reserved water rights settlements:

NOW, THEREFORE, BE IT RESOLVED by the Upper Colorado River Commission that it strongly urges the Secretary of the Interior to approve the said proposal and enter into the required contract by June 30, 1986;

BE IT FURTHER RESOLVED that the Commission directs its Secretary to forward a certified copy of this resolution to the Secretary of the Interior, the congressional delegations of the Upper Division States, and such other Federal and State officials as he deems appropriate.

CERTIFICATE

I, GERALD R. ZIMMERMAN, Executive Director and Secretary of the Upper Colorado River Commission, do hereby certify that the above Resolution was adopted by the Upper Colorado River Commission at an Adjourned Regular Meeting held in Salt Lake City, Utah on April 2, 1986.

WITNESS my hand this 3rd day of April, 1986.

Gerald R. Zimmerman

GERALD R. ZIMMERMAN
Executive Director and Secretary

Mr. **Strang**. I have one final witness on the Animas-La Plata project. Mr. Bill McDonald.

Mr. **McDonald**. Thank you. I am Bill McDonald, Chairman of the Colorado Water Conservation Board, testifying not only on behalf of the Board, but it is a pleasure and honor to testify on behalf of the Honorable Richard Lamm, Governor of the State of Colorado. I submitted for the record a written statement, which I will not reiterate. Let me summarize here four points out of that and conclude by commenting on the Animas-La Plata project.

First of all, the state would request funding for the Narrows project on the Platte River in Eastern Colorado. It is not included in the President's budget. We have yet to complete some preconstruction prerequisites, namely the conclusion of the section 7 Endangered Species Act consultation process, which concerns the whooping crane, and I believe that can be successfully completed during 1987. The Bureau has more funding with which to finish up their work. We have a cooperative three-state—Nebraska, Wyoming and Colorado—effort underway with the Bureau and the Fish and Wildlife Service to provide for the first time a unique solution to an endangered species problem in the West. We would, therefore, respectfully request the funding for the Narrows project so that funding could be completed.

First, let me touch on the Stagecoach Reservoir project. The Small Projects Reclamation Act loan program of the Bureau of Reclamation is one which has the strong support of the State of Colorado. I realize, of course, legislation is pending that would increase the authorized ceiling for that program, and until that ceiling is increased, appropriations cannot be made.

Let me state for the record, however, you will hear from a gentleman later on who speaks for that project. It is one for which an application is pending. It is in all regards ready to go to construction. The State and Water Conservation Board, of which I am the Director, has been authorized to spend $6 million of state money on that project. That money is appropriated. It is, if you will, in my bank account. We wait only for the Bureau of Reclamation to be in a position to execute the necessary contracts and have an appropriation in hand so they can proceed, and I support the request of Mr. John Fetcher, who will speak to you subsequently.

The third thing I would touch on is the Colorado River Basin control program of the Bureau of Reclamation. Suffice it to say it has the strong support of the State of Colorado, and we concur in the President's budget request for that very important and unique water quality program on the Colorado River.

Finally, and you will hear from the chairman of the City Council of the City of Pueblo very briefly, let me say I support a construction start for the Fountain Creek flood control project in Floodwell, Colorado, a very important flood control project in the heart of that city that will permit economic development that cannot go forward unless we can succeed in moving that project. There is a capability statement officially from the Corps of Engineers in the amount of $1.36 million, and that is the sum which the state supports.

To conclude quickly, you have heard from other witnesses about the Animas-La Plata project. Let me just highlight four things.

There is, first of all, a comprehensive, final and binding settlement, which the state, the two tribes and the major non-Indian water users in Southwest Colorado have reached. That settlement has three major components. One, the provision of water supplies to the tribes, first from the Dolores and Animas-La Plata project; and, secondly, by way of separate quantifications on individual streams throughout Southwestern Colorado.

The second major component is the proposed creation of tribal development funds partially funded by the Federal government and partially funded by the State of Colorado. The tribal development funds are the means by which the reservations can be made into true homelands in that those funds are needed in order that project water supplies and the street quantifications can actually be put to use on the land and the necessary work on the reservation done.

And, finally, in response to the requirements of this Congress and of the administration, we have responded to the challenge of up-front financing and cost sharing. We propose an up-front financing and cost sharing package that approaches about 38 percent of the combined costs of the Animas-La Plata project and tribal development funds. I detail in my written statement the components of that should the committee be interested in the details. We believe the cost sharing and up-front arrangement which we have proposed meets in every particular the requirements of the Reagan Administration as set forth in the President's January 1984 letter to Senator Laxalt, which we understand to be the President's statement of what he seeks in the way of cost sharing.

It is further more responsive, and we think meets the requirements of the United States Congress, in that you set forth in the 1985 supplemental appropriations bill last summer that there should be reasonable cost sharing arrangements offered to and entered into with the Secretary of the Interior.

We find that the settlement which we have achieved is the way and, indeed, the only way of which we are aware the United States can discharge its Federal obligations under the 1968 Colorado River Basin Project Act, which cited the Animas-La Plata project, among others, in the context of basin-wide development and as a project which is to be built with first delivery of water to the Central Arizona project, which in fact has already occurred. It is the only way we are aware of which the United States can discharge what are uniquely its sole responsibilities as trustee to the two Indian reservations in Colorado.

Finally, I would conclude by observing the up-front financing and cost sharing package which we have put together is, to our knowledge, comparable with every other agreement that the administration has supported or otherwise entered into. It is equal to the percentage contributions to which the administration has agreed and the pending omnibus authorization legislation for the Corps of Engineers. It matches the agreement already executed on the Buffalo Bill Dam and Reservoir in Wyoming. It exceeds the percentage contributions the Secretary just this morning agreed to in the case of the Central Arizona project, and as I have indicated, we believe otherwise meets the criteria set forth in the letter to Senator Laxalt.

We would hope we find favorable action with the administration. If not there, we would certainly seek to work with Congress to effectuate that which we understand to have met the criteria you have set forth.

Mr. Chairman, thank you very much. We appreciate your time.

[The statement of J. William McDonald follows:]

STATEMENT OF J. WILLIAM McDONALD, DIRECTOR
COLORADO WATER CONSERVATION BOARD

BEFORE THE
ENERGY AND WATER DEVELOPMENT SUBCOMMITTEES
COMMITTEES ON APPROPRIATIONS
UNITED STATES SENATE AND HOUSE OF REPRESENTATIVES

ON FY 87 APPROPRIATIONS FOR
COLORADO WATER DEVELOPMENT AND FLOOD CONTROL PROJECTS

Washington, D.C.
April 15, 1986

Introduction

I am J. William McDonald, Director and Secretary of the Colorado Water Conservation Board. I am testifying on behalf of the Honorable Richard D. Lamm, Governor of Colorado; Mr. David H. Getches, Executive Director of the Colorado Department of Natural Resources; and the Board itself, which is the state agency charged with the protection, conservation, and development of the water resources of the State of Colorado.

Summary of Requests

Colorado supports the funding included in the President's recommended FY 87 budget for Bureau of Reclamation and Corps of Engineers projects in Colorado, especially the Bureau's Animas-La Plata Project, which is a centerpiece of the just negotiated settlement of the reserved water rights claims of the Southern Ute and Ute Mountain Ute Tribes. In addition to the projects included in the President's proposed budget, funding is respectfully requested:

(1) to complete the Endangered Species Act consultation process and other construction prerequisites on the Narrows Project,

(2) for the Stagecoach Reservoir Project under the Small Reclamation Projects Act loan program in the amount of $100,000, and

(3) for a construction start on the Fountain Creek flood control project in the amount of $1.36 million.

Bureau of Reclamation (Water Development Projects)

On-Going Projects. We urge that Congress maintain the funding levels requested by the President for on-going projects. We would caution that all of Colorado's on-going projects will, under the President's recommended budget, receive less funding than has been appropriated to them in the current fiscal year. Further cuts would be unduly harsh.

We believe that Colorado has taken its fair share of cuts in the President's budget. Other projects throughout the reclamation west must bear their proportionate burden in these times of fiscal austerity. We would strongly resist any effort to increase funding for other Bureau projects at the expense of Colorado's on-going projects. Hopefully this committee is of the same view.

Animas-La Plata Project. This project, which was authorized in 1968, is a joint Colorado-New Mexico project designed, among other things, to address many of the water supply problems which confront the Indian reservations in the project area. Other components of the project will serve non-Indian populations in Colorado and New Mexico with municipal water. Finally, project water would significantly strengthen the irrigated agricultural economy of southwestern Colorado.

The Animas-La Plata Project is a key to the resolution of the reserved water rights claims of the Ute Mountain Ute and Southern Ute Indian Tribes. Those claims are pending in court and would have a dramatic impact on water users in Colorado and New Mexico if litigated.

The State of Colorado, Ute Mountain Ute Indian Tribe, Southern Ute Indian Tribe, and non-Indian water users in southwestern Colorado have just agreed to a comprehensive and final settlement of the Tribes' Winters water rights claim in southwestern Colorado. This agreement resolves the long-standing reserved water rights claims of the Tribes by recognizing those rights and providing the Tribes with the physical and financial resources to put those rights to use.

The settlement avoids costly and divisive litigation over the nature and extent of these Indian water rights. Furthermore, the settlement provides benefits to all water users in southwestern Colorado and to municipal and agricultural water users in New Mexico.

The settlement has three major components:

(i) the satisfaction of disruptive Winters rights claims through the delivery of water from the Dolores Project and the Animas-La Plata Project and the quantification of water for the Tribes on various streams,

(ii) the establishment of Tribal development funds to assist the Tribes in making their Reservations economically self-sufficient, and

(iii) the commitment to non-federal up-front financing/cost-sharing for the Animas-La Plata Project and for the Tribal development funds.

The keystone of the settlement is the provision of water to the two Tribes from the Dolores Project, which will be completed in 1993, and the Animas-La Plata Project, which is not yet under construction although it was authorized by Congress in 1968 and was to have been built concurrently with the first delivery of water to the Central Arizona Project. The additional water provided by these projects will permit the continuance of non-Indian economies dependent upon existing water supplies while simultaneously providing the Tribes with the water they need to develop the resources of their Reservations.

In light of the importance of the Animas-La Plata Project to the proposed settlement, a major component of the settlement is the commitments made by the State of Colorado, the Ute Tribes, and local water users to honor the mandate expressed by Congress in the 1985 Supplemental Appropriations Act to develop a reasonable arrangement for cost-sharing satisfactory to the Secretary of the Interior for the construction of the Animas-La Plata Project. $78.3 million worth of non-federal, up-front, cash contributions during construction and assumption by non-federal parties of the $81.8 million cost of construction of the Southern Ute Reservoir and Ute Mountain Ute irrigation facilities result in a 28.5% reduction ($160.1 million) in federal monetary outlays. $67.1 million, which is the discounted present worth of future repayments to the United States by New Mexico and Colorado beneficiaries, are also counted as part of the local cost-share, bringing the total non-federal contributions to the $562.2 million cost of the project to $227.2 million.

Narrows Project. This project was reauthorized by Congress in 1970. It will provide supplemental water to some of Colorado's most productive agricultural lands, municipal water to several rural communities, and significant recreational opportunities. Another project purpose will be flood control. Finally, secondary benefits will accrue to downstream water users in Nebraska.

The Narrows Reservoir will be the largest water body in close proximity to the greater Denver metropolitan area. The project will yield numerous recreational benefits to the rapidly growing communities along Colorado's Front Range. For example, boaters now frequently travel over 200 miles to Lake McConaughy in Nebraska, while facilities in the metropolitan area are being used to their capacity. The Narrows Project will substantially expand the area's water-based recreational resource to the benefit of well over a million people.

The project was in a construction status in 1977 when it was halted by the Carter Administration. At that time, activity on the project was suspended even though property acquisition and final engineering and design work were underway. In fiscal years 1983 and 1984, the Bureau updated and completed the planning for the project.

FY 86 appropriations were $500,000, primarily to be used to conduct the section 7 consultation process under the Endangered Species Act. In order to insure the success of this process, which concerns the project's alleged impacts on the endangered whooping crane, and in order to complete other pre-construction work, we respectfully ask that the Congress appropriate additional funding in FY 87.

Other Projects. We also want to remind Congress that Colorado has four other authorized projects--Fruitland Mesa, San Miguel, Savery-Pot Hook, and West Divide. If these authorized projects are not going to be funded with Congressional appropriations, despite the fact that repayment would be made from Colorado River Storage Project (CRSP) power revenues, then CRSP power revenues should, in Colorado's opinion, be made available in a manner which will enable the Upper Division states themselves to finance the construction of water projects which will achieve a level of development equivalent to that represented by these authorized, but as yet unconstructed, CRSP participating projects.

To this end, Colorado continues to explore ways to make CRSP power revenues payable directly to the four Upper Colorado River Basin states. Such funds would then be used by those states to finance water project construction in order that the level of development agreed to by Congress, the seven Colorado River Basin states, and the purchasers of CRSP power can be achieved. This is a matter of highest priority for Colorado and we fully intend to pursue it to conclusion.

Bureau of Reclamation (Small Reclamation Projects)

Colorado strongly supports the Bureau's Small Reclamation Projects Act program. Several Colorado projects have benefitted from this program in the past and we expect to have more candidates in the future.

Of immediate interest is the Stagecoach Reservoir Project on the Yampa River in northwestern Colorado. The project sponsor has completed its application to the Bureau, the necessary environmental mitigation has been worked out, and the project is otherwise ready to go to construction. Furthermore, the Water Conservation Board has been authorized to finance $6 million of the project's cost with state appropriations.

We respectfully request that Congress include $100,000 in its FY 87 appropriations for this project. It is not included in the President's budget request.

Bureau of Reclamation (Colorado River Water Quality Improvement Program)

The seven states of the Colorado River Basin have endorsed a coordinated, basinwide approach to the reduction of salinity in the Colorado River. The salinity control units being planned and constructed by the Bureau of Reclamation are an integral component of the overall salinity control program. We would call your attention to the detailed statement being submitted on behalf of the seven basin states, acting through the Colorado River Basin Salinity Control Forum, in which statement Colorado concurs.

Corps of Engineers

The sums contained in the President's recommended budget are, with the exceptions noted below, adequate for the timely execution and continuation of federal flood control programs in Colorado. We would caution, however, that any reduction in these budget requests would unnecessarily jeopardize the lives and properties of many thousands of Coloradans.

Especially important is the President's request for construction money for the South Platte River project below Chatfield Lake. Located in the heart of the Denver metropolitan area, this is a critical flood control project. It is important that construction on the South Platte River project be maintained on schedule.

We support the President's recommended budget for $240,000 for continuing planning and engineering on the Westerly Creek flood control project in Denver and Aurora. This project is needed to enable local governments in the area to solve problems upstream from the proposed federal project, which would be located on Lowry Air Force Base. Those upstream problems cannot be addressed until the federal project goes forward.

We take exception to the failure of the President's recommended budget to include funding for the Fountain Creek flood control project, which addresses major flood control problems in the heart of Pueblo. The solution of those problems will enable redevelopment activities to go forward which are of great importance to the economic welfare of the community. This project is included for authorization in the pending omnibus water resources legislation and the Corps has expressed the capability to proceed. In anticipation of the passage of that legislation, and based upon the Corps' capabilitiy statement, we urge that construction funds in the amount of $1.36 million be appropriated for the Fountain Creek project.

I appreciate the opportunity to appear before you. Thank you for your time and consideration.

Mr. **Strang**. Finally, Mr. Fred Kroeger, if we have time.

Mr. **Kroeger**. Mr. Chairman, Congressman Myers, my statement is in the record, so I will be very brief.

A year ago, when this body and the Senate appropriated money subsequent to the Secretary's approval of the cost sharing agreement, it seemed like an impossible job. It seemed like an assignment that was not achievable. However, it was achieved, and we have come back with this proposal, as Mr. McDonald has indicated. But I conclude, after being here a couple days, because we come with our arms around our Indian friends, because we come with an understanding and appreciation and respect for each other, instead of shooting and shouting that the Secretary of Interior doesn't really know how to handle that, this must be something new, and I hope it is something new. I hope it is a precedent on which a lot of relationships with Indian water rights and Indian claims can be settled.

We have worked together for over 30 years, and we are still neighbors, we are still friends. We had to give them a lot, there was a tremendous amount of give and take before we arrived at this conclusion, and I hope that your influence with the Secretary and your influence with the legislative body will provide us those necessary funds so we can get started.

Again, we really appreciate your coming to our area and hope you will come a lot sooner than it took to get there this time.

[The statement of Fred V. Kroeger follows:]

SUMMARY PAGE

PROJECT	REQUEST
Dolores Project (FY87)	$22,637,000 Construction Funds
Animas-La Plata Project (FY87)	$ 1,000,000 Construction Funds

STATEMENT OF FRED V. KROEGER
PRESIDENT OF THE BOARD OF DIRECTORS
SOUTHWESTERN WATER CONSERVATION DISTRICT OF COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
April 15, 1986

I am Fred Kroeger, President of Southwestern Water Conservation District. I have served on the District's Board of Directors since 1956. The Southwestern Water Conservation District was created by the Colorado Legislature in 1941 to preserve the scarce water resources in southwestern Colorado. To this end, the Pine River Irrigation Project and Florida Water Projects were constructed, the Dolores Water Project is now more than half completed, and the Animas-La Plata Project has been developed as an integral cog interlinking these storage, municipal and industrial irrigation projects.

I will focus on the Animas-La Plata Project in my remarks, in part because we are at a turning point in order to assure Project construction, and in part because I am here to urge you to pattern all other water projects on the Animas-La Plata Project as the standard of cooperation among competing water interests.

Water is a scarce commodity in southwest Colorado. The farmers and ranchers, the mineral interests, the towns, and subdividers and land developers, all have laid a claim to water through the prior appropriation system developed in Colorado. Parallel to this system, the United States Supreme Court recognized that the federal government, and those in a trust relation with the federal government, impliedly reserved water outside the prior appropriation system to make such entities as Indian reservations economically feasible units. The Ute Indian Tribes have reservations, and therefore reserved water rights, dating back to 1868, which pre-date all other appropriated water rights in this area. If the reserved Indian water rights were enforced, it is likely that many streams, such as the Mancos River, would be unavailable for non-Indian use, and further, that municipal water supplies for towns such as Durango would be sharply curtailed. Obviously, the potential of conflicting water rights has been a major source of concern, and has somewhat curtailed development throughout the water district.

At the behest of Congress and the State of Colorado, cost-sharing on the Animas-La Plata and the reserved water rights issue were brought together at the negotiation table. While the Federal Government participated in the negotiations throughout 1985, ultimately, it was the non-federal water users who reached an accord in the monumental "Agreement in Principle" signed by the Southern Ute and Ute Mountain Ute Indian Tribes, the State of Colorado, and various water districts, including the Southwestern Water Conservation District, on March 14, 1986. The

Agreement provides that if the Animas-La Plata Project is built the state and local water entities agree to certain cost-sharing and/or water allocations, the Tribes agree to relinquish their reserved rights claims in return for Animas-La Plata Project water certain negotiated direct flow rights and development funds to put the water to use, and various non-signatories to the agreement have agreed to water allocations among themselves and the Tribes.

The potential for litigation and community divisiveness was enormous, but good faith negotiations and statewide commitments have emphasized that the good of all residents in southwest Colorado was more important than enforcing individual water claims. It has been estimated that the real cost of litigating the reserved rights would be in excess of $60,000,000. The alternative is to build the Animas-La Plata Project which is the prerequisite to the accord reached among these disparate water interests. Without the Animas-La Plata Project there will be insufficient water to meet the needs of both the Indian and the non-Indian water users. With the Agreement, water needs and cost-sharing have been quantified. Neighbors know they can continue to rely on the goodwill and good judgment of adjacent landowners, regardless of race.

The interest and commitment generated by the Animas-La Plata Project are not limited to southwest Colorado. The state of Colorado has been instrumental in promoting a negotiated settlement of the Tribes' reserved water rights. Although this is the first federally funded water project which has been required to meet the amorphous cost-sharing standards of the Department of Interior, and it has been difficult for non-federal parties to ascertain the bases for the federal cost-sharing figures, both Colorado and New Mexico have assisted in the development of cost-sharing packages, because of the importance of the Project to southwest Colorado and northern New Mexico. Further, in the "Agreement in Principle." Colorado has quantified a cost-sharing pledge. Unfortunately, the federal government was unwilling to sign the Agreement in Principle. Colorado and New Mexico did meet the federal cost-sharing criteria such as they were, and now Secretary of Interior Hodel and the Administration of this government are trying to back out of their previous agreement. Quite frankly, such conduct is not worthy of the United States government; however, they have not stopped at simply avoiding a commitment. Ross O. Swimmer, Assistant Secretary for the Bureau of Indian Affairs, was sent by Secretary Hodel to approach the Indian tribes as to funding an all-Indian water project. This was certainly a double dealing approach and does not inure to the credit of the United States. However, it is gratifying to know that neither the Indians nor the non-Indians would accept this special interest plan. The bottom line is that our negotiations with the United States Government have not created a great deal of respect for the system, because of Administration back-door dealing and breaking of promises. We take heart, however, in remembering that the United States has been in the vanguard in water development and Congress has led the way. The state and local promises made to assist the completion of the Project are predicated on a continuing strong partnership with the federal government. Because the Administration has been unable to keep its promises, we must turn to Congress for help.

To this end, I appear before you to request your assistance in bringing the Animas-La Plata Project and its attendant Agreement in Principle to fruition. I am pleased to note that the President has recognized the intrinsic worth of this Project by requesting $1,000,000 in his Fiscal Year 1987 Budget. I urge you to make as broad a commitment to this Project as possible since it represents the consensus of diverse entities to place the good of the community as a whole, before individual interests. I have always been proud to be a native of the Four-Corners area, with the Hispanic, Indian and Anglo cultural input, but never more so than today when I can honestly say the Animas-La Plata Project represents the triumph of the community spirit.

I thank you for your continued assistance.

Fred V. Kroeger, President
Southwestern Water Conservation
District of Colorado

Mr. **Strang**. Before we have a comment on Fountain Creek, are there any questions the committee might need to ask of these witnesses?

Mr. **Bevill**. I don't believe there are any questions. I might say this, Mike, it was certainly impressive to see what you have accomplished, and all of you should be commended for what you have done. I was impressed when I had the opportunity to go out there and visit your fine state and see the importance of these projects and what they are going to mean to the area.

So we will be working with you, and we do have our limitations, but we will work with you and do the best we can to accomplish the goals you all have set.

Mr. **Strang**. Thank you.

Mr. **Myers**. May I say that I apologize for not being here for the entire testimony. A group of us went to New York for a colleague's funeral, and I just got back. These projects certainly aren't new to this subcommittee. We have been hearing about them for years. The chairman has even seen them now.

Is there any opposition in Colorado? Is everybody on board now?

Mr. **Strang**. John, there are some people in any community opposed to any project, and Colorado is no exception, nor is New Mexico.

Mr. **Myers**. I think we had a witness the other day who opposed it. The people in elected positions, the Governor, the legislature, support it, however.

Mr. **Strang**. Yes, they support the project.

Mr. **Myers**. Thank you.

[The following was provided for the record:]

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Bryon V. Bradford (1907 - 1985)

April 18, 1986

Mr. Hunter Spillan
Energy & Water Development
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Hunter:

Enclosed is a copy of the Resolution of the La Plata County Commissioners in support of the Animas-La Plata Project. I would appreciate it if you could see to it that the Resolution is made a part of the record on the just-completed appropriations hearings. I neglected to furnish you with copies of the Resolution at the hearing.

Many thanks for your assistance. I am sorry we didn't get a chance to visit. I would appreciate any suggestions you might have for us in our effort to get the Animas-La Plata Project off the ground.

Sincerely,

Sam Maynes

Frank E. (Sam) Maynes

FEM;ilm
Enclosure

RESOLUTION NO. 1986-21

A RESOLUTION TO PROMOTE THE ANIMAS - LA PLATA PROJECT IN LA PLATA COUNTY

WHEREAS, the proposed Animas - La Plata Project is a water project designed to promote the beneficial use of water in the Four Corners Region, and specifically in La Plata County; and,

WHEREAS, the Animas - La Plata Project will provide water for irrigation of arid agricultural land and thereby facilitate the further development of agriculture and will establish and maintain a firm agriculture base for present and future generations of residents of La Plata County; and,

WHEREAS, the Animas - La Plata Project will supply water needed by the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe so that they can maintain agricultural, industrial and cultural self-sufficiency and also provide a reasonable basis for settlement of Indian water rights claims; and,

WHEREAS, the Animas - La Plata Project insures an adequate, dependable supply of water for the City of Durango and the surrounding area at a reasonable cost and will also provide critically needed storage for use by Durango and numerous other municipalities in the Four Corners area; and,

WHEREAS, the creation of two reservoirs in the Animas - La Plata Project area will substantially increase the recreational opportunities for residents of and tourists in La Plata County by providing new facilities for boating, fishing, picnicking, and camping; and,

WHEREAS, the creation of two reservoirs in the Animas - La Plata Project area will enhance and preserve the natural beauty of La Plata County; and,

WHEREAS, the Animas - La Plata Project will accommodate the future growth in population in La Plata County by conserving water which would otherwise be appropriated elsewhere; and,

WHEREAS, construction of the Animas - La Plata Project will create jobs for residents of La Plata County, said County having been an area in serious need of increased employment opportunities for many years; and,

WHEREAS, La Plata County has grown and prospered through agriculture, mining, tourism, and the unique combination of these industries has produced a quality of life that should be preserved; and,

WHEREAS, the Animas - La Plata Project has been a dream of generations of La Plata County residents; and.

Resolution No. 1986-21
Page two

WHEREAS, in addition to the many benefits of the Animas - La Plata Project as noted above, it is the judgement of the Board of County Commissioners of La Plata County that the Project will enhance the tax base of La Plata County and will greatly increase sales tax and other tax revenues all to the benefit of the citizens of La Plata County,

NOW, THEREFORE, BE IT RESOLVED that because the Animas - La Plata Project will contribute to the welfare, health, recreation, prosperity and quality of life of present and succeeding generations of La Plata County residents, the Board of County Commissioners supports the Animas - La Plata Project and commits itself to assist in bringing the project to reality.

BE IT FURTHER RESOLVED that copies of this Resolution be sent to the Governor of the State of Colorado and all members of the Colorado congressional delegation.

DONE AND ADOPTED in Durango, Colorado this 11th day of April, 1986.

(SEAL)

BOARD OF COUNTY COMMISSIONERS

Doris A. Brennan
Doris A. Brennan, Chairman

R T Scott
R. T. Scott, Vice-Chairman

R A Roth
Rollie A. Roth, Commissioner

ATTEST: Carl DeMari
Deputy Clerk to the Board

Distribution: Richard D. Lamm, Governor
State of Colorado
Congressional Delegation
State and Federal
Local Steering Committee/Fred Kroeger

CDL:mw

Mr. STRANG. Mr. Chairman, it is my pleasure to introduce the Honorable Mike Occhiato, President of the City Council of the City of Pueblo, to comment on the Fountain Creek proposal.

Mr. OCCHIATO. My name is Mike Occhiato, and I am representing the Pueblo City Council and citizens of Pueblo to speak on behalf of the project. To date, we know of no opposition to that project in Pueblo.

The City of Pueblo is situated at the junction of the Arkansas River and the Fountain Creek. The Fountain Creek flows south through the Northeast section of town. Most of the water coming into Fountain Creek emanates from the Pike's Peak area and a lot of tributaries north of Pueblo, where heavy development in the Colorado Springs area has occurred over the past 26 years. Fountain Creek originates at the base of Pike's Peak and has many tributaries which include Monument Creek.

Fountain Creek flooding has been a historical problem in Pueblo and recorded since 1855. The most recent flood we have had was 1965. The drainage basin area contributing to the Fountain Creek above Pueblo is approximately 926 square miles. The impact will continue as more land is developed to the North.

There are a considerable number of homes in a residential area adjacent to the Creek.

In the 1965 flood, the city suffered, with 53 city blocks inundated with up to eight feet of water depth affecting 59 businesses and over 370 residences.

When another flood occurs, the impact will be borne by 721 low and moderate-income families located adjacent to and east of the Fountain Creek. In addition, 682 commercial and industrial structures will be affected. This includes our entire downtown area, the core of our city, which includes our city government buildings. Both of our regional hospitals are located west of the Fountain. With both major bridges affected in the proposed project area, emergency medical care would be hindered.

Directly to the west and adjacent to the Fountain is interstate 25, a major highway which originates in El Paso, Texas and ends in the State of Montana. This highway separates the core of the downtown from the Fountain. When another major flood occurs, this highway will incur severe and costly damage.

U.S. Highway 50 crossing is at the northern section of the proposed project. In addition, the Atchison, Topeka, and Sante Fe Railway is directly west of the Fountain, between the Fountain and interstate 25. During flood stage, the tops of the rails would be overtopped by flood waters. The Missouri Pacific Railroad Bridge is another structure which faces flood damage. Consequently, without proper flood control, the city would face paralysis hindering car, truck and rail transportation serving Pueblo and cities north and south of Pueblo. The most severe impact is the many low-income families whose entire life earnings are invested in their homes within the flood plain area.

Without flood protection, potential development is faced with increased construction costs and higher insurance rates. Development is needed to keep our core city alive and the community financially healthy.

Project: In 1965, after the last major flood, and for the past 21 years since then, the City of Pueblo sought assistance to prevent another occurrence. The city has initiated flood damage prevention measures which, in part, has consisted of improvement in the Fountain Creek Channel.

Since 1972 through 1985, the city, through governmental and private assistance, has acquired property and made improvements worth over $1,050,000. Of this, $787,624 has been accepted as the city's contribution toward a Federal/local government project, which is expected to cost about $8 million. Another flood will leave our core city destroyed and the many families adjacent homeless.

Accepting Gramm-Rudman and fearing changes in the tax law as it affects us, and coupled with an unemployment of 12.5 percent, we sincerely request your favorable consideration in appropriating $1.3 million to fund the desperately needed Fountain Creek project.

I will submit this. I have a complete statement, but I will submit it with more detail.

[The statement of Mike Occhiato follows:]

1855, THE MOST RECENT IN 1965. THE DRAINAGE BASIN AREA CONTRIBUTING TO THE FOUNTAIN CREEK ABOVE PUEBLO IS APPROXIMATELY 926 SQ. MILES. THE IMPACT, INTENSIFIES AS MORE LAND IS DEVELOPED TO THE NORTH.

THERE ARE A CONSIDERABLE NUMBER OF HOMES IN A RESIDENTIAL AREA ADJACENT TO THE CREEK.

IN THE 1965 FLOOD, THE CITY SUFFERED WITH 53 CITY BLOCKS INUNDATED WITH UP TO 8 FEET OF WATER DEPTH EFFECTING 59 BUSINESSES AND OVER 370 RESIDENCES.

WHEN ANOTHER FLOOD OCCURS, THE IMPACT WILL BE BORNE BY 721 LOW AND MODERATE INCOME FAMILIES LOCATED ADJACENT TO AND EAST OF THE FOUNTAIN CREEK. IN ADDITION, 682 COMMERCIAL AND INDUSTRIAL STRUCTURES WILL BE AFFECTED. THIS INCLUDES OUR ENTIRE DOWN TOWN AREA, THE CORE OF OUR CITY, WHICH INCLUDES OUR CITY GOVERNMENT BUILDINGS. BOTH OF OUR REGIONAL HOSPITALS ARE LOCATED WEST OF THE FOUNTAIN. WITH BOTH MAJOR BRIDGES EFFECTED IN THE PROPOSED PROJECT AREA, EMERGENCY MEDICAL CARE WOULD BE HINDERED.

DIRECTLY TO THE WEST AND ADJACENT TO THE FOUNTAIN IS INTERSTATE 25, A MAJOR HIGHWAY WHICH ORIGINATES IN EL PASO, TEXAS AND ENDS IN THE STATE OF MONTANA. THIS HIGHWAY SEPERATES THE CORE OF THE DOWNTOWN FROM THE FOUNTAIN. WHEN ANOTHER MAJOR FLOOD OCCURS, THIS HIGHWAY WILL INCUR SEVER AND COSTLY DAMAGE.

U.S. HIGHWAY 50 CROSSING IS AT THE NORTHERN SECTION OF THE PROPOSED PROJECT. IN ADDITION, THE ATCHISON, TOPEKA, AND SANTE FE RAILWAY IS DIRECTLY WEST OF THE FOUNTAIN, BETWEEN THE FOUNTAIN AND INTERSTATE 25. DURING FLOOD STAGE, THE TOPS OF THE RAILS WOULD BE OVERTOPPED BY FLOOD WATERS. THE MISSOURI PACIFIC RAILROAD BRIDGE IS ANOTHER STURCTURE WHICH FACES FLOOD

DAMAGE. CONSEQUENTLY, WITHOUT PROPER FLOOD CONTROL, THE CITY WOULD FACE PARALYSIS HINDERING CAR, TRUCK, AND RAIL TRANSPORTATION SERVING PUEBLO AND CITIES NORTH AND SOUTH OF PUEBLO. THE MOST SEVERE IMPACT IS THE MANY LOW INCOME FAMILIES WHOSE ENTIRE LIFE EARNING ARE INVESTED IN THEIR HOMES WITHIN THE FLOOD PLAIN AREA.

WITHOUT FLOOD PROTECTION, POTENTIAL DEVELOPMENT IS FACED WITH INCREASED CONSTRUCTION COSTS AND HIGHER INSURANCE RATES. DEVELOPMENT IS NEEDED TO KEEP OUR CORE CITY ALIVE AND THE COMMUNITY FILNANCIALLY HEALTHY.

PROJECT

IN 1965, AFTER THE LAST MAJOR FLOOD, AND FOR THE PAST 21 YEARS SINCE THEN, THE CITY OF PUEBLO HAS SOUGHT ASSISTANCE TO PREVENT ANOTHER OCCURANCE.

THE CITY HAS INITAITED FLOOD DAMAGE PREVENTION MEASURES WHICH IN PART HAS CONSISTED OF IMPROVEMENT IN THE FOUNTAIN CREEK CHANNEL.

SINCE 1972 THROUGH 1985, THE CITY, THROUGH GOVERNMENTAL AND PRIVATE ASSISTANCE, HAS ACQUIRED PROPERTY AND MADE IMPROVEMENTS WORTH OVER $1,050,000. OF THIS, $787,624 HAS BEEN ACCEPTED AS THE CITY'S CONTRIBUTION TOWARD A FEDERAL/LOCAL GOVERNMENT PROJECT, WHICH IS EXPECTED TO COST ABOUT EIGHT MILLION DOLLARS.

FOR THE PAST 21 YEARS, WE HAVE LIVED WITH THE CONSTANT THREAT OF ANOTHER FLOOD WHICH WILL LEAVE OUR CORE CITY DESTROYED AND THE MANY FAMILIES ADJACENT, HOMELESS.

[illegible]

ACCEPTING GRAMM-RUDMANN AND FEARING [redacted], COUPLED WITH AN UNEMPLOYMENT OF 12.5%, WE SINCERELY REQUEST YOUR FAVORABLE CONSIDERATION IN APPROPRIATING __1.2__ MILLION TO FUND THE DESPERATELY NEED FOUNTAIN CREEK PROJECT.

AGAIN, THANK YOU FOR YOUR TIME AND FAVORABLE CONSIDERATION.

Mr. **Bevill**. Very good. Thank you very much. We look forward to visiting you again some day.

Tuesday, April 15, 1986.

UPPER COLORADO RIVER PROJECTS

WITNESS

GERALD R. ZIMMERMAN, EXECUTIVE DIRECTOR, UPPER COLORADO RIVER COMMISSION

Mr. **Bevill**. The committee will come to order. We are pleased to hear from Mr. Gerald Zimmerman.

Mr. **Zimmerman**. Thank you. I am Jerry Zimmerman.

Mr. Chairman, the Upper Colorado River Commission is an interstate compact administrative agency created by the Upper Colorado River Basin Compact of 1948. The member states of the Upper Colorado River Commission are: Colorado, New Mexico, Utah and Wyoming. Since its inception, the Commission has actively participated in the development, utilization and conservation of the water resources of the Colorado River Basin.

The member states and the Upper Colorado River Commission have always given strong support to water resources development in the Upper Colorado River Basin and, in particular, to the Colorado River storage project and participating projects. We who are interested in water resources development in the Basin appreciate the opportunity to provide testimony before this subcommittee.

Representatives of each of the Commission's member states will submit testimony to this subcommittee in support of specific appropriation requests that reflect the official position of each state with respect to the development of the water resource projects and programs in the Upper Colorado River Basin, for the Colorado River storage project and participating projects within each of their states. I do not intend to repeat that testimony herein. However, the Commission does fully support the states' testimony.

As you will note, the states have requested the proposed fiscal funding as included in the President's proposed budget. We are willing to accept reduced funding in the ongoing program this year to help address the Federal deficit. However, we would urge you to not reduce that funding further. Through the requested funding we will be able to develop projects and programs within the Upper Colorado River Basin, which will benefit the local, national and regional economies.

I think you have heard a lot as concerns the Animas-La Plata project from the testimony from the Colorado people. The Upper Colorado River Commission, during its adjourned annual meeting, supported the agreement which has been adopted in principle by the State of Colorado, the five water conservancy and conservation districts. They have fully identified what is contained in that agreement, and I, along with the Commission, would urge that you do everything to help insure that that agreement is fully implemented.

In addition to the above-stated support for fiscal year 1987 funding for the Colorado River project and participating projects, the Commission does support, along with the seven Colorado River Basin states, funding for the salinity control program, as identified in Public Law 93-320, as amended, and Public Law 98-569. This program, designed to maintain the salinity levels of the Colorado River system at established water quality standards, is endorsed by the seven Colorado River Basin states and is essential for the overall development and management of the Colorado River system. A more detailed statement regarding specific funding for that program will be provided by the Executive Director of the Colorado River Salinity Control Forum.

On behalf of the Upper Colorado River Commission, I want to thank you for providing me the opportunity to present this statement before your subcommittee.

Mr. BEVILL. Very good. A very good statement. Thank you very much.

[The statement of Gerald R. Zimmerman follows:]

STATEMENT OF GERALD R. ZIMMERMAN, EXECUTIVE DIRECTOR
UPPER COLORADO RIVER COMMISSION
before the
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
of the
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

April 15, 1986

Summary of Specific Action Requested

Appropriation of funds recommended by the representatives of the States of Colorado, New Mexico, Utah, and Wyoming for the Colorado River Storage Project and participating projects.

Mr. Chairman, the Upper Colorado River Commission is an interstate compact administrative agency created by the Upper Colorado River Basin Compact of 1948. The member States of the Upper Colorado River Commission are: Colorado, New Mexico, Utah, and Wyoming. Since its inception, the Commission has actively participated in the development, utilization, and conservation of the water resources of the Colorado River Basin.

The member States of the Upper Colorado River Commission have always given strong support to water resources development in the Upper Colorado River Basin and in particular to the Colorado River Storage Project and participating projects. We who are interested in water resources development in the Basin appreciate the opportunity to provide testimony before this subcommittee in support of the appropriation of funds to continue the construction and operation of the Colorado River Storage Project and participating projects in Fiscal Year 1987.

Representatives of each of the Commission's member States will submit testimony to this subcommittee in support of specific appropriation requests that reflect the official position of each State with respect to the development of the water resource projects and programs in the Upper Colorado River Basin. Such specific requests will not be repeated here; however, they are fully supported by the Commission. As you will note, the States' requested funding for the Fiscal Year 1987 ongoing program for the Colorado River Storage Project and participating projects is consistent with the proposed President's Budget for the Bureau of Reclamation. This year, we are willing to reluctantly accept this reduced funding in the ongoing program to help reduce the Federal deficit. However, the Commission urges no further reduction in the proposed funding for these projects. Through these requested appropriations, water resource projects and programs within the Upper Colorado River Basin can be funded at a level which will benefit the local, regional, and national economies.

As concerns the Animas-La Plata Participating Project, during its Adjourned Regular Meeting held on April 2, 1986 the Upper Colorado River Commission adopted a Resolution which strongly urges the Secretary of the Department of the Interior to: (1) approve the non-Federal up-front/cost sharing proposal which has been agreed to in principle by the State of Colorado, the two Indian tribes, and the five Colorado water conservancy and conservation districts involved in the Project, and (2) enter into the required contract by the June 30, 1986 congressionally established deadline. A copy of that resolution has been attached to this statement, and I would request that it be included in the record of these hearings.

In addition to the above-stated support for the Colorado River Storage Project and participating projects for Fiscal Year 1987, the Upper Colorado River Commission supports the development and implementation of the Colorado River Salinity Control Program described in Public Law 93-320, as amended by Public Law 98-569. This salinity program, designed to maintain salinity levels in the Colorado River system within established water quality standards, is endorsed by the seven Colorado River Basin States and is essential to the overall development and management of the Colorado River Basin. A more detailed statement regarding the specific funding for the salinity program will be presented in the testimony of the Executive Director of the Colorado River Basin Salinity Control Forum.

Mr. Chairman, on behalf of the Upper Colorado River Commission, thank you for the opportunity to present this statement for the Committee's consideration.

RESOLUTION
of
UPPER COLORADO RIVER COMMISSION

Re: Construction of Animas-La Plata Participating Project

WHEREAS, the Animas-La Plata Project is a participating project of the Colorado River Storage Project; and

WHEREAS, the Secretary of the Interior was directed "to proceed as nearly as practicable with the construction of the Animas-La Plata [Project] . . . concurrently with the construction of the Central Arizona Project to the end that such project shall be completed not later than the date of the first delivery of water from said Central Arizona Project . . . ."; and

WHEREAS, the first delivery of water to the Central Arizona Project has already been made but construction has not yet started on the Animas-La Plata Project; and

WHEREAS, in 1985 the United States Congress appropriated $1 million for a construction start on the Animas-La Plata Project contingent upon non-federal interests entering into a reasonable up-front financing/cost-sharing agreement with the Secretary of the Interior by June 30, 1986; and

WHEREAS, the United States Departments of the Interior and of Justice subsequently required that an up-front financing/cost-sharing arrangement for the project be taken up as a part of the settlement negotiations which the State of Colorado had initiated with the Ute Mountain Ute and Southern Ute Indian Tribes concerning the tribes' reserved water rights claims in Colorado; and

WHEREAS, an "Agreement in Principle on the Settlement of Colorado Ute Tribes Reserved Water Rights" was entered into on March 14, 1986, by the State of Colorado, the two tribes, and five Colorado water conservancy and conservation districts, which Agreement includes a non-federal up-front financing/cost-sharing proposal; and

WHEREAS, the said proposal is responsive in all regards to the parameters for non-federal financing and cost-sharing set forth in President Reagan's January 24, 1984, letter to Senator Paul Laxalt and meets or exceeds the percentage contributions required of non-federal interests for other federal water resources projects and Indian reserved water rights settlements:

NOW, THEREFORE, BE IT RESOLVED by the Upper Colorado River Commission that it strongly urges the Secretary of the Interior to approve the said proposal and enter into the required contract by June 30, 1986;

BE IT FURTHER RESOLVED that the Commission directs its Secretary to forward a certified copy of this resolution to the Secretary of the Interior, the congressional delegations of the Upper Division States, and such other Federal and State officials as he deems appropriate.

CERTIFICATE

I, GERALD R. ZIMMERMAN, Executive Director and Secretary of the Upper Colorado River Commission, do hereby certify that the above Resolution was adopted by the Upper Colorado River Commission at an Adjourned Regular Meeting held in Salt Lake City, Utah on April 2, 1986.

WITNESS my hand this 3rd day of April, 1986.

Gerald R. Zimmerman
GERALD R. ZIMMERMAN
Executive Director and Secretary

TUESDAY, APRIL 15, 1986.

STAGECOACH PROJECT

WITNESS

JOHN FETCHER, UPPER YAMPA WATER CONSERVANCY DISTRICT

Mr. BEVILL. Next we have John Fetcher. Your statement will be made part of the record. Mr. Fetcher, you may proceed as you wish.

Mr. FETCHER. I am glad to see you are running ahead of schedule. I won't take advantage of that.

My name is John Fetcher. I am a rancher, my son and I are ranchers in the Elk River Valley about 16, 20 miles north of Steamboat Springs, and I am also Secretary of the Upper Yampa River District, the applicant for a project called the Stagecoach project on the river, about 16 miles south of Steamboat Springs.

I know what it is to run out of water when trying to make our hay crop. And in 1977, in the drought year of 1977, when the rivers ran dry in our area, some ranchers didn't put up a single bail of hay and had to sell their herds. As Wayne Aspin so eloquently said, "In the arid West, the only way to have water during the dry months is to store the spring runoff."

And our Stagecoach project will do just that. It will provide 4,000 acre feet for agricultural irrigation. It will provide 800 kilowatts of hydropower for the area, 11,000 acre feet for growing municipalities and industries in our valley, and, incidentally, will provide a major recreation area pond, lake, which is a very important industry in our part of the country right now. In fact, since the difficulties that we are having with the coal industry in Northwest Colorado and agriculture, recreation has now become number one in our particular area. And when the ski area closes, that part of our economy really falls flat.

This project will create for our country and our state an asset of lasting value, and it will create job opportunities and revenues for the area which we so desperately need at this present time.

The total cost is 16.4 million. It is not a big project. The state, as Director McDonald just told you, is putting up $6 million on a 40-year, five-percent loan. Our district, as of this date, has spent $1.3 million to get us this far, and we plan to spend an additional $1 million, which would make a total of non-Federal funds of approximately $8.4 million.

We are looking to the Small Reclamation Projects Act, which Mr. McDonald referred to, which we know has not been passed by Congress yet, for the balance of our funding. But this means that we are putting up a little over 50 percent in terms of non-Federal funding. This we hope will catch your attention.

If you approve a modest $100,000 as a line item for Stagecoach, we are ready to go into construction this summer, and we think that your approval of that modest amount will release $4 million of the state funds. And if we can get started this summer, we will save a bundle, because in the first place our construction season can only be done during the summertime, because of our tough winters, and we really have got hungry contractors knocking at my door right now. So that is really what we are asking for.

We think it is a good project, and I am sure that Mike Strang will testify to that, and perhaps former Congressman Kogovsek will reinforce what I have said.

Mr. BEVILL. Thank you. That was a very good statement.

Mr. MYERS. Thank you.

[The statement of John Fetcher follows:]

Upper Yampa Water Conservancy District

Testimony of John Fetcher before the
Appropriations Committee, 15 April 1986

My name is John Fetcher. My son and I and our wives own and operate a cattle ranch on the Elk River, 20 miles north of Steamboat Springs, Colorado. I am also secretary of the Upper Yampa Water Conservancy District, applicant for a loan and grant under the Small Reclamation Projects Act for construction of the Stagecoach Reservoir, 17 miles south of Steamboat Springs on the Yampa River.

We ranchers know what it is to run out of irrigation water in early July when we are trying to make our hay crop. In our part of the country it takes over two tons of hay to get one cow through our tough winter. In the drought year of 1977, when the streams went dry some ranchers didn't put up a single bale of hay and had to sell their herds. As Congressman Wayne Aspinall so often said, "In the arid West, the only way to have water during the dry months is to store the spring runoff."

Stagecoach Reservoir will do just that, providing 4000 acre feet for hay production and irrigated pasture as well as supplying 800 kw of hydroelectric power and 11,000 af for the growing municipalities and industries in the Yampa basin. In addition, as a consequence, the reservoir will provide a needed recreation site that will boost the area's economy which slumps drastically at the end of the ski season. The economy of northwest Colorado depends on agriculture, coal mining, and recreation, the largest contribution coming from recreation because of the depressed state of the other two.

This undertaking will give northwest Colorado much needed help, creating an asset of lasting value for our country and providing job opportunities for our growing population. Total project cost is 16.4 million of which the State of Colorado is putting up 6 million and our District 2.4. This represents over 50% in non-Federal funds. If you would approve $100,000 of our 8 million dollar application to the Bureau under the Small Reclamation Projects Act, this would give the State the incentive to release a portion of their funds so that we could go into construction this summer.

Our small District has spent 1.3 million of our money to get to a point where we could break ground in August. With engineering virtually complete we are ready to bid construction of the dam in June. This would save us a year and a bundle of money, because in our tough climate we cannot build during the winter. Because contractors in our area are really hungry, prices will be very competitive. Final draft of the EIS has been published by the Bureau with public review period having expired yesterday. Mitigation of environmental impacts of the project has been addressed to the satisfaction of the Colorado Division of Wildlife, Federal Fish and Wildlife Service and EPA. Because of this the 404 permit should not be a problem.

If you approve at least $100,000, I am confident I can convince the State to turn loose their funds so we can get started this summer.

Phone: (303) 879-2424
Steamboat Springs, Colorado 80488-0339

TUESDAY, APRIL 15, 1986.

NORTHWEST POWER PLANNING COUNCIL

WITNESSES

ROBERT W. SAXVIK, CHAIRMAN, NORTHWEST POWER PLANNING COUNCIL

KAI LEE, VICE-CHAIRMAN, NORTHWEST POWER PLANNING COUNCIL

Mr. BEVILL. Next we have Mr. Robert Saxvik.

Mr. SAXVIK. Mr. Chairman and members of the committee, my name is Bob Saxvik. I am the Chairman of the Northwest Power Planning Council. On my right is Kai Lee, who serves as its Vice-Chairman. We would like to present some testimony concerning the fiscal year 1987 budget proposal for the Bonneville Power Administration.

As you are well aware, the Congress created and the Governors of the four Pacific Northwest States of Idaho, Montana, Oregon and Washington, appointed members on the Council to serve in terms of power planning for that region and also in fish and wildlife mitigation protection enhancement programs. The power plans are designed to assure the region acquires only those resources needed. The fish and wildlife program is equally as important, and it is a major effort to restore the fish and wildlife resources in the Columbia River system, as affected by the hydroelectric system.

Again this year, the Council has reviewed the Bonneville budget, as proposed by the administration. The budget proposes conservation borrowing authority cuts that appear to be less severe than the massive cuts proposed in fiscal year 1986. Upon further analysis, the cuts would substantially affect the region's ability to acquire the most cost-effective conservation resources when they are needed in the future.

Because of this substantial surplus of electricity in the Pacific Northwest—and let me distinguish that situation later on—the Council is not advocating the acquisition of conservation savings that would only add to our current surplus. However, we believe it is necessary to put in place the mechanisms and the institutional capability to acquire conservation when needed.

I might add, during recent hearings on the 1986 power plan, many of the utility community members indicated they would still support the continuation of conservation efforts, and it would be more costly to stop the program and then start it at a future date and that those costs, they made the case that those costs would be more burdensome to the system than continuing on with a modest program. That is in the residential weatherization area, I would add.

The Council also analyzed the Bonneville conservation budget for the current fiscal year budget, which contains issues addressed by the Council and the subcommittee last year. I think this gets to one of the main purposes of our visit here, which is to point out the substantial uncertainties resulting from the intervention by the Office of Management and Budget after Congress had acted to restore these proposed cuts last year.

First I would like to discuss the 1987 BPA budget. The conservation budget for 1987 proposes obligations of $139.2 million. In the past, the Council has criticized the budgets for failure to diversify BPA conservation activities in all sectors. The 1987 budget reflects diversified and increased activity in the commercial, industrial, agricultural and governmental sectors and decreased activity in the existing residential buildings sector, where much is already known about conservation activities. That has been a successful and well-learned program in the Northwest.

Unfortunately, the budget also proposed a $21.7 million undistributed reduction, and not being a man of strong fiscal character, I have trouble understanding that language, but nevertheless, this would occur in the conservation borrowing authority for the fiscal year. Since these cuts are not distributed to specific programs, it is difficult to anticipate their precise impact. However, if it is accepted that the residential weatherization program for existing residences is budgeted at the minimum level, viable level, I should add, as the budget narrative asserts, distributing the 21.7 million cut to the remainder of the conservation budget would result in a 24 percent reduction in capability, building and promotion of new building energy efficiency.

I would indicate here the new building energy efficiency is a very high Council priority. It was addressed at length in the last planning process. Buildings constructed today will far outlast the current surplus of power in the Northwest, which, in addition, is more expensive and in some cases simply impossible to recover the cost effective conservation savings at a later date. Thus, even in times of surplus, it is essential to capture cost effective savings when new buildings are built, I guess, is some of our Western analogy in that if they construct the building right the first time—it is much more expensive obviously to go back and retrofit a building for these energy saving measures after the building stock is once up and operating.

In the administration budget, the principal source of funding for new building efficiency is found in the model conservation standards account. The funding level in that account was established before the Council's 1986 power plan called for increased incentive levels to spur efficient construction. The funding proposed in the administration budget is assumed to be minimally adequate, and may well be inadequate, for MCS implementation. Spreading the proposed cuts to the remainder of the conservation budget while preserving the residential weatherization program at a minimum level would result in a 33% cut in remaining activities.

The Council believes the region's conservation activities cannot sustain those levels of cuts without severe adverse effects. The Council is cognizant of the region's current surplus and not advocating the acquisition of megawatts either through conservation or construction of generating resources.

Instead we have been promoting a diversified effort to prepare a timely and efficient implementation of conservation programs which, when needed in the future, will be implemented. These preparations will be seriously disrupted if the administration's proposed cuts are accepted by Congress.

Referring to the 1986 budget, last year, the Council testified in opposition to the administration's proposal to cut $72 million from the BPA conservation budget. Congress restored those cuts, and we are grateful for that, leaving BPA with a conservation budget in excess of 145 million. The administration 1987 budget re-estimates BPA conservation budget for 1986 at 107. Furthermore, we understand that OMB did not provide any borrowing authority allocation to BPA until four months into the fiscal year. This is difficult for an agency, such as Bonneville, to do reasonable planning under those conditions. That substantial delay and reduction in level from the Congressionally approved amount is not explained in the budget documents.

It raises a concern that clear Congressional action rejecting proposed cuts does not count for much when relevant fiscal year activities begin. Although it is too early to know the effect of these program reductions, we believe that Congress should determine the rationale for these reductions. It appears clear the predictability of BPA's conservation programs is undermined by dramatic changes in funding levels.

Mr. Chairman, we appreciate this subcommittee's past assistance in continuing the Pacific Northwest pursuit of cost effective energy planning and would be pleased to answer any questions you may have.

[The statement of Robert Saxvik follows:]

TESTIMONY OF ROBERT SAXVIK, CHAIRMAN
NORTHWEST POWER PLANNING COUNCIL
BEFORE THE
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
APRIL 15, 1986

Mr. Chairman and members of the Subcommittee, my name is Robert Saxvik and I am chairman of the Northwest Power Planning Council. With me today is Kai Lee, vice-chairman of the Council. We are here to present testimony concerning the FY 87 Administration budget proposal for the Bonneville Power Administration.

The Council was created by Congress and the Governors of the four Pacific Northwest states--Idaho, Montana, Oregon, and Washington. Under the provisions of the Northwest Power Act, the Council is directed to develop and monitor implementation of the Northwest Power Plan and the Columbia River Basin Fish and Wildlife Program. The power plan is designed to ensure that the region acquires only those resources that are cost effective and needed. The fish and wildlife program is equally important. It is a major effort to restore the fish and wildlife resources of the Columbia River system, as affected by the development and operation of the hydroelectric system.

Again this year, the Council has reviewed the BPA FY 87 budget as proposed by the Administration. That budget proposes conservation borrowing authority cuts that appear to be less severe than the massive cuts proposed in FY 86. However, upon further analysis, it is clear that the cuts would substantially affect the region's ability to acquire the most cost effective conservation resources when they are needed in the future. Because of the substantial surplus of electricity in the Pacific Northwest, the Council is not advocating the acquisition of conservation savings that would only add to the current surplus. However, we believe it is necessary to put in place the mechanisms and institutional capability to acquire conservation when needed.

The Council also analyzed the Bonneville conservation budget for the current fiscal year, a budget which contains issues addressed by the Council and the subcommittee last year. The evolution of the FY 86 budget points to substantial uncertainties resulting from intervention by the Office of Management and Budget after Congress had acted to restore proposed cuts last year.

FY 87 BPA BUDGET. First, I'd like to discuss the FY 87 BPA budget. The conservation budget for FY 87 proposes obligations of $139.2 million. In the past, the Council has criticized the budgets for failure to diversify BPA conservation activities in all sectors. The FY 87 budget reflects diversified and increased activity in the commercial, industrial, agricultural and governmental sectors--and decreased activity in the existing residential buildings sector where much is already known about conservation activities.

Unfortunately, the budget also proposes a $21.7 million "undistributed reduction" in conservation borrowing authority for the fiscal year. Since these cuts are not distributed to specific programs, it is difficult to anticipate their precise impact. However, if it is accepted that the residential weatherization program for existing residences is budgeted at the minimum viable level (as the budget narrative asserts), distributing the $21.7 million cut to the remainder of the conservation budget would result in a 24% reduction in capability building and the promotion of new building energy efficiency.

New building energy efficiency is a very high Council priority. Buildings constructed today will far outlast the current power surplus in the Northwest. In addition, it is more expensive and, in some cases, simply impossible to recover the cost-effective conservation savings at a later date. Thus, even in times of surplus, it is essential to capture cost-effective savings when new buildings are built.

In the Administration budget, the principal source of funding for new building efficiency is found in the model conservation standards (MCS) account. The funding level in that account was established before the Council's 1986 Power Plan called for increased incentive levels to spur efficient construction. If the funding proposed in the Administration budget is assumed to be minimally adequate--and it may well be inadequate--for MCS implementation, spreading the proposed cuts to the remainder of the conservation budget, while preserving the residential weatherization program at the minimum viable level, would result in a 33% cut in the remaining conservation activities.

The Council believes that the region's conservation activities can not sustain these levels of cuts without severe adverse effects. The Council is cognizant of the region's current surplus and is not advocating the acquisition of megawatts, either through conservation or the construction of generating resources. Instead, the Council has been promoting a diversified effort to prepare for timely and efficient implementation of conservation programs when needed in the future. These preparations will be seriously disrupted if the Administration's proposed cuts are accepted by Congress.

FY 86 BPA BUDGET. Last year, the Council testified in opposition to the Administration's proposal to cut $72 million from the BPA conservation budget. Congress restored the cuts, leaving BPA with a conservation budget in excess of $145 million. The Administration's FY 87 budget re-estimates BPA's conservation budget for FY 86 at $107 million; furthermore, we understand that OMB did not provide any borrowing authority allocation to BPA until four months into the fiscal year. That substantial delay and reduction in level from the Congressionally approved amount is not explained in the budget documents. It raises a concern that clear Congressional action rejecting proposed cuts does not count for much when the relevant fiscal year begins. Although it is too early to know the effect of these program reductions, we believe that Congress should determine the rationale for the reductions. It appears clear that the predictability of BPA's conservation programs is undermined by such dramatic changes in funding levels.

Mr. Chairman, we appreciate this subcommittee's past assistance in continuing the Pacific Northwest's pursuit of cost-effective energy planning and would be pleased to answer any questions you may have.

Mr. MYERS [presiding]. Thank you for your testimony.

Ms. Lee, do you have a statement?

Ms. LEE. No, I don't.

Mr. MYERS. The chairman had to go to the floor. We have a vote underway. I apologize for him having to leave and thank you for your testimony. There will be a short recess while we conclude the vote.

[Recess.]

TUESDAY, APRIL 15, 1986.

NUCLEAR TEST FUNDS

WITNESS

HON. BILL GREEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. BEVILL [presiding]. The committee will come to order.

We are glad to hear from our good friend and colleague, Bill Green. You may proceed as you wish. Your prepared statement will be made part of the record.

Mr. GREEN. Thank you very much, Mr. Chairman.

I do appreciate this opportunity to come before you. Since the full statement will be in the record, maybe I can chat informally about my concerns.

You will remember that when the bill came before the full Appropriations Committee last year, I had raised the question as to the continued testing of nuclear weapons. I must say I have grown more concerned as the year has gone on. It had been my hope that my action in Committee, as well as the action taken on the floor of the House with the resolution we recently adopted urging the Test Ban Treaty and with the similar vote in the Senate some time ago, would persuade the administration to begin negotiations with the Soviet Union toward a comprehensive test ban treaty.

Unfortunately, that has not occurred, and as a result of this, those of us in the Congress who are concerned at this situation now must turn to our prerogatives under the Constitution to try to do what we think is right in this situation.

Let me focus particularly on what seems to have caused the administration's unwillingness to participate in negotiations with the Soviets on a test ban treaty. That is the Strategic Defense Initiative, of course, and particularly that component of it involving the x-ray laser. As you are very well aware, that does involve utilizing a nuclear explosion to try to generate a laser beam which then could be sufficiently focused to have the effect of destroying a warhead in space, preventing it from penetrating deeply into the atmosphere.

And certainly one of the things that has prompted us to undertake this research is we have every reason to believe Soviets have undertaken similar research. More important, if they now resume testing, they will begin again pursuing their research on the x-ray laser. In the end—and I think this is the perfect proof of why we really both benefit from a comprehensive test ban treaty—this will be self defeating for everybody because if there is no test ban, we will develop something, they will develop something. The problem is, of course, that an x-ray laser can shoot down not just warheads in space, it can also destroy the satellites in space that we use for our command, control, communications and intelligence purposes.

And at that point, as they develop the x-ray laser and as we develop the x-ray laser, if we go on with this nuclear testing, we are going to spend billions of dollars trying to shield our assets in space from the effect of x-ray lasers. In the end, we will have spent billions and billions of dollars, and we both will be no better off than we are today.

It seems to me that that which causes the administration to say "Let's put the comprehensive test ban treaty on the back burner", in fact, is proof positive of why we ought to be proceeding right now with the comprehensive test ban.

And so I would urge the committee to consider this proposal—if you choose not to do so, of course, that is your prerogative. I intend to offer in the full Appropriations Committee an amendment that would provide we would not test if the Soviets would not test.

It is my understanding that a similar kind of proposal is going to be offered on the floor of the House in connection with the supplemental appropriations bill, but in view of that measure's uncertain fate, I think it is important to consider it in connection with the fiscal year 1987 appropriations process. I hope that this committee and the full Appropriations Committee will give it that consideration.

Mr. BEVILL. Thank you very much.

[The statement of Bill Green follows:]

BILL GREEN
15TH DISTRICT, NEW YORK

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEES:
RANKING MINORITY MEMBER
HUD-INDEPENDENT AGENCIES

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Testimony by REP. BILL GREEN
before the
House Appropriations Subcommittee on Energy and Water
April 15, 1986

Mr. Chairman, thank you for this opportunity to testify before the Subcommittee on Energy and Water regarding the provisions of the Energy Appropriations bill for FY87.

Mr. Chairman, I am here to speak on behalf of a Comprehensive Test Ban. Last September I stood before the full Appropriations Committee and offered an amendment to cut off all funds in the Department of Energy Appropriations for FY86 which would be used for nuclear testing. I subsequently withdrew my amendment and expressed my desire that the Administration would view my action as a warning--a warning that if the Administration did not begin negotiating a mutual, verifiable Comprehensive Test Ban with the Soviets, that I would offer my amendment on the FY87 bill.

The Administration's answer has been clear. Although the Soviets have halted their own testing program for eight months; although the House of Representatives passed H.J.Res. 3, urging the Administration to negotiate a CTB, by 268-148; although two years ago the Senate passed similar language by 77-22, the Administration has refused to begin negotiations for a Comprehensive Test Ban. I feel it is now necessary for the Congress to impose one.

The Urgent Supplemental Appropriations bill, which is before the House this week, includes a $62 million transfer for accelerated research on the nuclear-explosion-powered X-ray laser program. Ironically, this program is a key reason the Administration does not want a CTB and at the same time a key reason why a moratorium on nuclear testing is as much in America's interest as in the Soviets'.

Unless we halt our nuclear testing program, and especially the X-ray laser program, we leave the door open for the Soviets to resume testing and to futher develop their own X-ray laser program. It is becoming clear that if we and the Soviets further develop our X-ray laser capability it will threaten the survivability of all command, control and communication satellites, necessitating their hardening at a cost of several billion dollars.

In addition to putting the brake on the Soviet-U.S. arms race, a CTB would do more than any other arms control measure in halting horizontal proliferation. A Comprehensive Test Ban is now more verifiable than ever; the Soviets have indicated that on-site inspections are a possibility and our monitoring ability has been improved to a fraction of a kiloton.

I will be offering an amendment to prohibit the use of funds for nuclear testing when this Subcommittee reports its bill to the Appropriations Committee. My testimony today is intended to serve notice of this intention and to encourage the members of this Subcommittee to support this critical measure.

TUESDAY, APRIL 15, 1986.

CENTRAL ARIZONA PROJECT

WITNESSES

GERALD ANTON, PRESIDENT, SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY

RICHARD B. WILKS, TRIBAL ATTORNEY, PIMA-MARICOPA INDIAN COMMUNITY

PHILIP J. SHEA, TRIBAL ATTORNEY, PIMA-MARICOPA INDIAN COMMUNITY

Mr. BEVILL. Next we have Mr. Gerald Anton.

Mr. Anton, we will be glad to put your prepared statement in the record. You may proceed as you wish.

Mr. ANTON. Mr. Chairman, members of the committee, I have with me Mr. Richard Wilks and Mr. Phil Shea, legal counsel for Salt River Pima-Maricopa Community. I am Gerald Anton, President of the Community Council. Council of the Community has asked me to come here before you and express the position of the Community in regards to the expenditure of yet more money for the development of water projects in Central Arizona for the benefit of non-Indian citizens and to continue exclusion of people in lands of the Salt River Pima Indian Community.

In 1902, the Congress enacted the Reclamation Act. A major dam was built on the Salt River to create Roosevelt Reservoir. The preexisting canals were purchased by the United States at that time. Other dams and water delivery systems were built. Massive water storage was created for the benefit of non-Indian farmers across the Salt River Valley. The lands of the Salt River Pima-Maricopa Arizona Community were short changed. They are excluded from the area of the project. The United States continued the subsidies to non-Indian water users while defying Congressional direction to supply Salt River Indian Community lands.

The Secretary of Interior has historically deferred to the wishes of the non-Indian water user's expense and rights of the Salt River Pima-Maricopa Indian Community. There has always been plenty of water for non-Indians in the Salt River Valley and the non-Indian water interests come again to Congress for more money, more support for their water projects, while they have refused to recognize the water requirements of the people of the Salt River Pima-Maricopa Indian Community.

After almost a year of negotiations, the Salt River Water Users Association has yet to accept the moderate proposal for Federal representative proposals which have been basically adopted by the Salt River Community Council.

The Salt River Pima-Maricopa Indian Community Council opposes all appropriations to implement plan 6 while the water rights of the Salt River Indian Community are violated. No money should be appropriated by the United States Congress for water projects in Central Arizona whose benefit will spread only to non-Indian water users to the continued exclusion of Indian people, and land and justice so requires this.

And I thank you for the opportunity and the time to testify. We have a larger statement that we will submit for the record.

Mr. **Bevill**. That will be made part of the record. You have made a very fine statement.

[The statement of Gerald Anton follows:]

BEFORE THE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

THE SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY OPPOSES ALL APPROPRIATIONS FOR "PLAN 6" OF THE CENTRAL ARIZONA PROJECT, WHOSE BENEFIT FLOWS TO NON-INDIANS ONLY, SO LONG AS THE UNITED STATES FAILS TO ASSURE DELIVERY OF WATER TO THE SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY SUFFICIENT TO SATISFY ITS RIGHTS.

Salt River Pima-Maricopa
Indian Community
Gerald Anton, President
Rt. 1, Box 216
Scottsdale, Arizona 85256

Richard B. Wilks
Philip J. Shea
Tribal Attorneys
114 W. Adams, Suite 200
Phoenix, Arizona 85003

April 15, 1986

Mr. Chairman, Members of the Committee:

I am Gerald Anton, President of the Salt River Pima-Maricopa Indian Community. The Council of the Salt River Community has asked me to come before you and express in clear and certain language the position of the Community in regard to the expenditure of yet more money for the development of water projects in central Arizona for the benefit of non-Indian citizens and to the continued exclusion of the people and lands of the Salt River Pima-Maricopa Indian Community.

One hundred and twenty years ago non-Indian settlers came into the Salt River Valley and began to appropriate lands which had historically been the lands of the Pima and Maricopa Indians. In 1879 the President of the United States set aside a reservation for the Pimas and Maricopas along the Salt River so that we could continue our traditional economy based upon irrigation farming.

We live in a desert land. Our ancestors, from prehistoric times, irrigated the valley with a sophisticated system of canals which have been duplicated and followed by the Reclamation Project canals installed in the last hundred years. The life of our people was always dependent upon a supply of water sufficient to produce adequate crops. Until about a hundred years ago our people irrigated their lands directly from the Salt River: partially damming that river and causing its waters to flow into canals irrigating the lands for the production of crops. About a hundred years ago a non-Indian canal company erected a dam and diverted the waters of the Salt River and its tributaries into the Arizona Canal which they constructed across our reservation and beyond that into the area which is now Scottsdale and Phoenix, Arizona.

Since that time control over water has been in the hands of others.

In 1902 the Congress enacted the Reclamation Act. The Salt River Reclamation Project was created as a result of that Act. A major dam was built on the Salt River to create Roosevelt Reservoir. The preexisting canals were purchased by the United States. Massive water storage was created for the benefit of non-Indian farmers across the breadth of the Salt River Valley, both north and south of the Salt River.

The lands of the Salt River Pima-Maricopa Indian Community were shortchanged. A committee of sixteen non-Indian water users stipulated to a division of the waters within the valley and that stipulation was accepted in a modified way by the Territorial Court in the Kent Decree as to the lands of the Salt River Indian Community. The lands of the Salt River Pima-Maricopa Indian Community were excluded from the service area of the Project.

The allocation of water to the Salt River Indian Community was so outrageous that in 1916 Senator Henry Fountain Ashurst of Arizona introduced and the Congress enacted a bill requiring the Secretary of the Interior to provide reclamation project water to the Salt River Indian Community sufficient to irrigate 6,310 additional acres of land. The Interior Department refused to comply with the Congressional mandate claiming that there was insufficient water for Indian use. Yet at the same time the Secretary of the Interior signed an order allowing the inclusion in the benefits of the Salt River Federal Reclamation Project of an additional 13,000 acres of land - all owned by non-Indians.

There has always been plenty of water for non-Indians and scarcity of water for Indians in the Salt River Valley.

In 1937 the Secretary of the Interior finally reacted to the Act of 1916 by entering into a contract with the Salt River Water Users Association agreeing to pay a nonreimbursable 20% of the cost of Bartlett Dam in return for the delivery of up to 20,000 acre feet of water per year to the Salt River Indian Community. Out of a Congressional right of in excess of 34,000 acre feet, deliveries not to exceed 20,000 acre feet were finally promised and in the early 1940's delivered.

By the early 1940's the Salt River Pima-Maricopa Indian Community had delivery rights agreed to by the United States and its agent, the Salt River Water Users Association, in the amount of approximately 38,000 acre feet per year. But that amount was rarely, if ever, delivered. The adjudicated water, the so-called Kent Decree water, constituted the best and first right on the Salt River. It was a right without storage privileges since the Community was excluded from the benefits of the Salt River Federal Reclamation Project. That right, a so-called normal flow right, is delivered to the Bureau of Indian Affairs Irrigation District on the Salt River Indian Reservation on a daily basis throughout the year. The farms of the reservation either use it on that day or lose it. Approximately 18,000 acre feet therefore in many years dwindled to 10,000 acre feet. Crops are grown seasonally and only Indian land suffered from the use it or lose it burden.

Non-Indian farming has prospered in the valley and waters of the Salt River Federal Reclamation Project are distributed not only to non-Indian farmers within the Project boundaries, but in the amount of over 175,000 acre feet per annum to two districts outside the boundaries of the Project. The lands of the Salt River Indian Community receive such a miserly amount of water that without extensive groundwater pumping, scarcely 6,000 to 7,000 acres could be farmed out of the 28,000 irrigable and arable acres within the reservation.

We have petitioned the Congress for redress, we have sat in long and fruitless negotiating sessions with the Salt River Project, the State of Arizona and the United States; we have pleaded before tribunals of the Interior Department to allow the continued construction of the Central Arizona Project at a time when its demise had been planned and the date of its execution set; we have been patient, incredibly patient; we have finally brought lawsuits to protect and determine our rights; and at the request of members of the Arizona Congressional delegation have once again entered into negotiations with the Salt River Water Users Association for final and complete settlement of our water rights.

I come here today to report to you that after over a year of discussions, with a background of ten years of engineering reports and other discussions and in the face of agreement by the Council of the Salt River Pima-Maricopa Indian Community that settlement ought to be reached in substantial accordance with the suggestions of the federal representative, we face still an unmoving wall. It is possible that that wall may move and the Salt River Valley Water Users Association and the Secretary of the Interior may yet understand that settlement of the water rights of the Salt River Indian Communty are necessary to final and peaceful solution of the water problems of the entire valley, but they have not done so to this day.

Therefore, I come at the instructions of the Salt River Pima-Maricopa Indian Community Council to advise you of our position that no money should be appropriated by the United States Congress for water projects in central Arizona whose benefits will spread only to non-Indian water users to the exclusion of Indian people and Indian land. Justice so requires.

TUESDAY, APRIL 15, 1986.

CENTRAL ARIZONA PROJECTS

WITNESSES

LOUIS HOOD, PRESIDENT, FORT McDOWELL INDIAN COMMUNITY

ARLINDA LOCKLEAR, ATTORNEY, FORT McDOWELL INDIAN COMMUNITY

RICHARD DAUPHINAIS, ATTORNEY, NATIVE AMERICAN RIGHTS FUND

Mr. BEVILL. Are there any other statements? Next we have Mr. Louis Hood. Mr. Hood, we are very pleased to have you with us. You may proceed as you wish.

Mr. HOOD. Thank you, Mr. Chairman, and distinguished members of the committee.

On my right is my counsel, Council Attorney, Arlinda Locklear, and this is the other attorney, Rick Dauphinais.

Mr. BEVILL. We are glad to have each of you with us.

Mr. HOOD. I am Tribal Chairman for the Fort McDowell Indian Reservation. We have submitted copies of testimony, but at this time, I will take the few minutes that I have that I can use without the testimony.

As the previous Chairman of the Salt River Indian Reservation has expressed, I would like to express my feelings and frustration in coming before the committee. We have gone through with—our attorneys and Tribal Council members have approached the Salt River project with good intentions, and with good faith we will negotiate with our water rights, and at this point it has become a stalemate.

Coming to the cost-sharing agreement signing, at a meeting this morning I felt even more frustrated and had to be alone by myself and had to collect my thoughts, and I realized once again my tribe is being used. I am really really upset about this and feel that I must express myself in opposition to the Cliff Dam.

I realize I have a responsibility to my tribe—I was hoping when I came here that I would be on the opposite side of opposing—rather, being in favor, and now I am finding myself opposing. So that is my feelings about this building on Cliff Dam.

[The statement of Louis Hood follows:]

Testimony of Louis Hood,
President, Ft. McDowell Indian Community,
before House of Representatives Sub-Committee on
Energy and Water Development,
Committee on Appropriations, fiscal year 1987,
Bureau of Reclamation.
April 15, 1986

Mr. Chairman and members of the committee. My name is Louis Hood and I am president of the Ft. McDowell Indian Community in Arizona. I am also a member of the Community's water rights negotiations committee. I appreciate the opportunity to present the Community's views on the fiscal year 1987 budget for the Bureau of Reclamation.

The Community has a direct interest in the proposed budget. The proposed Bureau of Reclamation budget contains initial funding for a component of the Central Arizona Project known as Cliff Dam. Cliff Dam is to be constructed on the Verde River upstream from the Ft. McDowell Community and will principally serve the water needs of the downstream cities south of the reservation. The United States Department of the Interior acknowledges that the Fort McDowell Community has a federally reserved water right to Verde River water of at least 30,000 acre feet per annum. In fact, the Community receives no more than 7,000 acre feet per annum from the Verde. Despite this situation, the Department of the Interior has made no provision for either satisfying the Community's federally reserved right from stored Cliff Dam water or imposing regulations on the operation of the dam to that end. For those reasons, the Community opposes federal appropriations for Cliff Dam.

The Department's failure to take the Community's federally reserved water rights into account in the planning of or operational criteria for Cliff Dam is not a new experience for the Fort McDowell Community. Two reclamation dams have already been constructed in the watershed that could have but did not provide water for the Community. In 1911, the United States constructed Roosevelt Dam on the Salt River, which joins the Verde River just south of the Fort McDowell Reservation. Because of its storage capacity of 1.3 million acre feet, Roosevelt Dam greatly increased the water supply available to the downstream cities, thereby diminishing significantly the cities' need for Verde River water. Yet no provision was made for increasing the Verde River water supplied to the Community. In 1939, the United States constructed Bartlett Dam on the Verde River north of the Fort McDowell Reservation. The Bartlett Dam also increased the water supply available in the system, but again no provision was made for meeting the Fort McDowell Community's water needs. Roosevelt and Bartlett Dams are currently operated by the Salt River Project under contract with the United States, as will be Cliff Dam. The existing contracts and the proposed Cliff Dam operational criteria impose no obligations on Salt River Project with respect to the Community's federally reserved water rights. Thus, the proposed Cliff Dam will be the third reclamation structure in the valley that will serve principally the water interests of non-Indian users to the exclusion of the Fort McDowell Community's legal rights.

It is undeniable that the Fort McDowell people have a federally reserved water right to Verde River water. Yet, the United States has constructed two reclamation projects that deliver water to downstream Verde users while bypassing Fort McDowell. Now, the Bureau of Reclamation proposes to construct Cliff Dam that will deliver Colorado River water to downstream Verde users, again bypassing Fort McDowell. Even aside from the government's trust responsibility to protect the Community's interests, the government should at a minimum give Indian water needs the same consideration it gives non-Indian water needs. It has not done so in the Salt River Valley. For reason of this unconscionable neglect, the Fort McDowell people oppose Cliff Dam as now proposed.

The Community has attempted itself to assert its water needs. In 1980, it filed suit in federal court to obtain a quantification of its right. That federal action is now being held while the state court attempts to adjudicate all water users' right in the Salt, Verde and Gila Rivers, a process that will take decades to complete. The Community has also attempted to settle its water claims through negotiations with the Salt River Project, the valley water users' association. Thus far, those negotiations have not been productive.

The Community is aware, of course, that its opposition to Cliff Dam does not solve its water needs. The Community intends to take additional steps for that purpose. It will seek special legislation allowing it to sue the United States for breach of trust in failing to protect the Community's federal reserve water right at the time of the construction of Roosevelt and Bartlett Dams. The Community's lawyers have also been instructed to investigate the possibility of a breach of trust suit for failure to protect the Community's water rights in the construction and operation of Cliff Dam. Finally, the Community will exhaust all reasonable possibility of a settlement of its water claims; in the event negotiations fail, the Community will ask the Department of the Interior to impose regulations governing the operation of reclamation dams in the valley that will adequately protect the Community's interest. Until that time, however, the Community must oppose the construction of any additional reclamation dams that do not deal with the Community's needs.

Mr. BEVILL. You are opposed to the agreement that was executed this morning?

Mr. HOOD. I am opposed to the building of Cliff Dam, yes, at this point.

Mr. BEVILL. Are there any other statements?

Mr. MYERS. Do the Fort McDowell Indians have a reservation?

Mr. HOOD. It is a Federally recognized reservation, yes.

Mr. MYERS. Does the Verde River flow through the reservation?

Mr. HOOD. Yes.

Mr. MYERS. Does it flow through the reservation below the dam?

Mr. HOOD. Below the dam, yes. We are upstream users from the cities, but we are below the dam, yes. We had been the first village from the dam, but there are other villages above us now.

Mr. MYERS. In the establishment of the reservation, there was no rights established as far as water is concerned? You have nothing in the treaty?

Ms. LOCKLEAR. The tribe asserts and the United States Department of Justice agrees that the tribe has a Federally reserved water right to service the reservation. That right has never been fully adjudicated. The United States estimates the rights to be at a minimum of 30,000 acre feet per year, and presently the tribe receives no more than 7,000 acre feet per year.

Mr. MYERS. You have a problem with or without Cliff Dam, don't you?

Ms. LOCKLEAR. The position is that Cliff Dam will be the third or fourth reclamation project built on the system that could supply water for the tribe, but does not, in fact. Because it supplies downstream, non-Indian users——

Mr. MYERS. Were you in the room when the Colorado group testified? They have worked out an agreement for those Indians and prescribed an amount of water from the dam in Colorado. You might follow their guidance here.

Ms. LOCKLEAR. We are attempting that. We have been engaged in negotiations with the local Water Valley Users Association. Thus far, we have not been successful.

Mr. MYERS. Is it litigation or just negotiating?

Ms. LOCKLEAR. Actually both. Litigation is pending, but it is in state court. We expect it to be some number of years before it is wrapped up. We are actively negotiating.

Mr. MYERS. Thank you.

Mr. BEVILL. You are familiar with the agreement that was made this morning. Were you all present on that occasion?

Ms. LOCKLEAR. Yes.

Mr. BEVILL. You are saying that you oppose the agreement.

Ms. LOCKLEAR. We oppose it because it doesn't take into account the water rights, only non-Indian water users are accommodated by that agreement.

Mr. BEVILL. Do you plan negotiation on this?

Ms. LOCKLEAR. We are considering it, yes, Mr. Chairman.

Mr. BEVILL. I would think that would be what you would have to do.

Thank you very much.

TUESDAY, APRIL 15, 1986.

NEW JERSEY PROJECTS

WITNESS

HONORABLE WILLIAM J. HUGHES, A REPRESENTATIVE IN THE CONGRESS FROM THE STATE OF NEW JERSEY

Mr. **BEVILL**. Next we have our good friend and colleague, Congressman Bill Hughes. We would be glad to hear from you.

Mr. **HUGHES**. Thank you, Mr. Chairman.

Mr. Chairman and members of the committee, first I really appreciate the opportunity to appear once again before the House Appropriations Subcommittee on Energy and Water Development. Mr. Chairman, I have a statement which I would like to insert in the record. I am not going to read the statement.

Mr. **BEVILL**. Your prepared statement will be made a part of the record, without objection.

Mr. **HUGHES**. As you know, Mr. Chairman, members of the committee, it is my privilege to represent the Second Congressional District of New Jersey, the southern part of the State, which includes about 150 miles of shoreline on the Atlantic Ocean and the Delaware Bay. It is an area that has a number of problems.

We have a multi-billion dollar tourist economy, and a large commercial fishing industry that is housed in my district. The Intracoastal Waterway is extremely important for north-south traffic. Over the years there have been a number of projects that have been developed by the Army Corps that unfortunately, have been somewhat counterproductive, so I have a couple projects that represent design deficiencies and mitigation projects to try to correct what was done back in the early part of the century.

One such project is already underway and I want to talk about that, as well as another project that needs attention very desperately. I also wish to tell you that I have indicated a number of projects that I do support, but there is probably another dozen I have not indicated support for because they can be deferred. These are projects that in these times of tremendous fiscal problems I just cannot in good conscience ask this committee to fund.

I have indicated to my local officials in many instances that I will not seek funding for some projects, and I am only asking for funding for projects that I think are essential.

The Administration supports five of the projects. I believe that all those projects are essential, and I strongly support them. I don't think they have asked enough money for one of the projects for the New Jersey Intracoastal Waterway. There is a bank stabilization project that is essential in the Cape May Canal that needs attention. The bank is eroding because of all the commercial traffic and it is just going to get worse, and we are going to spend more money if we leave that go, so I am asking for an additional $800,000 for that project. The Administration is seeking $3,290,000 for the Intracoastal Waterway.

I ask for $850,000 for a comprehensive navigation study to try to determine whether or not the river depth in two of my major rivers is adequate. They are the Maurice River and the Salem

River. They are both viable commercial operations. There is some money in the budget. The Administration supports $718,000 for dredging for the Salem River project. We have developed a barge port there, which has tremendous potential.

We are for the first time out of my region shipping all kinds of goods overseas, and receiving all kinds of freight into Salem port. It is one of the first barge ports created in this country in many years, and we are very proud of the tremendous potential that that has.

We do need $718,000, the Administration supports that.

In Barnegat Inlet you may remember, this committee has very generously supported that project. We are ready for a construction start. In the past we have had problems with the state and the Federal government agreeing upon cost-sharing. That has all been worked out. The Administration supports it. It is a project that we have to get underway. It is the most dangerous inlet on the East Coast. We lose lives there every year.

It is a design deficiency. We recognize that. We are asking for $6 million for a construction start and that is supported by the Administration.

Cold Spring Inlet is one of my major inlets. It is where the Coast Guard training center is located. We need to keep that inlet open. That training center is the only training facility for the Coast Goard in the country. As you may remember, the Alameda County, California training center was closed some years ago. We must keep that inlet open.

I support the Administration's request for dredging for that particular inlet, which is $122,000.

The Cape May Inlet to Lower Township project is the first project not supported by the Administration. I believe it is important that we get authority for construction this year of the advance engineering and design recommendations of the Army Corps. We have already lost at that Cape May training Center the target range which is under water, and we have lost much of the heliport. The Coast Guard is alarmed about what is happening in our training center. We are losing it to the ocean.

If we don't begin our construction there now, we are going to have serious problems down the way.

One of the problems in the past is that it has not been authorized. It is now in the authorization bill. It is recognized by the Army Corps at this point and by the Coast Guard, but we have to begin construction there, so I am seeking about $913,000 for construction start there. That is a design deficiency. It is a mitigation project that it is essential we begin now on, Mr. Chairman, and members of the committee.

In the Intracoastal Waterway, we have discovered that as our commercial fisheries become more competitive, we have to go to bigger boats. We are competing against the Poles and Russians who actually have floating factory ships. We are now developing that capacity in our area, but the water depth is not sufficient to accommodate our new vessels that are coming on line. I am seeking an additional $100,000 for an Army Corps survey to determine what depth we need there and whether it is feasible so that we can in fact accommodate the new factory vessels that we are beginning to turn out in my region.

The Great Egg Harbor Inlet and Peck Beach project is a project I didn't seek funding for many years ago. In fact, what I did a few years ago when I first came to the Congress, my predecessor had continued to keep these projects alive through new studies and engineer design. I went to my community and said, are you serious about coming up with a non-Federal match and said the same to the state, and I couldn't get the commitments from them, so I didn't seek funding.

Now, the state after a 20-month study has scaled those projects back and I am seeking $132,000 so that we can once again take a look at the state's studies to see just what or how we can control the tremendous erosion we have in the Great Egg Harbor Inlet and Peck Beach area.

Finally, many years before I came to the Congress, the Army Corps received some funding for six demonstration projects, small, low-cost projects, to try to determine how we can stem erosion in the Delaware Bay. Unfortunately—I don't know how it happened—but unfortunately all the demonstration projects were sited on the Delaware side. The erosion on the New Jersey side is a little different.

We have different problems on the Jersey side, and I am seeking $500,000 for the Army Corps to look at low cost erosion projects for about six small communities along the Delaware Bay that suffered severe erosion over the past ten or fifteen years.

Mr. Chairman, those are the projects I seek funding for. As I indicated, I have not sought funding for a dozen other projects that my communities have requested, and I hope that the committee will be able to support my request. I would be happy to respond to any questions.

[The statement of Mr. Hughes follows:]

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STATEMENT OF

THE HONORABLE WILLIAM J. HUGHES, M.C.

BEFORE THE

HOUSE APPROPRIATIONS SUBCOMMITTEE ON

ENERGY AND WATER DEVELOPMENT

APRIL 10, 1986

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SUMMARY

PROJECTS SUPPORTED:

1. New Jersey Intracoastal Waterway -- $4,090,000 for maintenance dredging and bank stabilization
2. Delaware River Navigation Study -- $850,000 for a navigation survey
3. Salem River -- $718,000 for maintenance dredging
4. Barnegat Inlet -- $6 million for construction of a new south jetty and $487,000 in maintenance dredging funds
5. Cold Spring Inlet -- $122,000 for maintenance dredging
6. Cape May Inlet to Lower Township -- $913,000 to begin construction of a comprehensive navigation and flood control project
7. Intracoastal Waterway -- $100,000 to survey a 2,000-foot stretch of the waterway for possible deepening
8. Great Egg Harbor Inlet and Peck Beach -- $132,000 for advanced engineering and design of a navigation and flood damage prevention project
9. Delaware Bay flood control projects -- $500,000 for construction of low-cost flood control projects in six communities along the Delaware Bay

THANK YOU VERY MUCH, MR. CHAIRMAN. I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOUR SUBCOMMITTEE ONCE AGAIN, TO TESTIFY ON BEHALF OF A NUMBER OF NAVIGATION AND FLOOD CONTROL PROJECTS IN MY DISTRICT WHICH ARE IMPORTANT TO THE ECONOMY OF SOUTHERN NEW JERSEY.

AS THOSE OF YOU FAMILIAR WITH MY DISTRICT KNOW, I HAVE THE PRIVILEGE OF REPRESENTING THE LARGEST COASTAL AREA OF NEW JERSEY. MY DISTRICT INCLUDES SOME 150 MILES OF COASTLINE ALONG THE ATLANTIC OCEAN AND DELAWARE BAY, AND ENCOMPASSES SOME OF THE MOST BEAUTIFUL SEASHORE RESORTS IN AMERICA. THESE COASTAL RESOURCES ARE THE HEART AND SOUL OF OUR STATE'S MULTI-BILLION DOLLAR TOURISM, COMMERCIAL FISHING AND BOATING INDUSTRIES, MOST OF WHICH ARE CENTERED IN MY DISTRICT.

I HAVE WORKED CLOSELY OVER THE YEARS WITH THE ARMY CORPS OF ENGINEERS, THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND OUR MANY LOCAL AND COUNTY OFFICIALS, TO MAKE SURE THAT THESE VALUABLE COASTAL RESOURCES ARE MANAGED AND MAINTAINED PROPERLY AND IN THE BEST PUBLIC INTEREST. IN THAT REGARD, I WISH TO THANK YOU, MR. CHAIRMAN, AND THE MEMBERS OF YOUR SUBCOMMITTEE, FOR THE FAIR AND THOROUGH CONSIDERATION YOU HAVE ALWAYS GIVEN TO OUR NEEDS IN SOUTHERN NEW JERSEY.

I HAVE SPENT THE LAST SEVERAL MONTHS TALKING TO STATE OFFICIALS, THE ARMY CORPS AND MANY BUSINESSES LOCATED ALONG OUR RIVERS AND INLETS, TO HELP PRIORITIZE THESE NEEDS. AT THE PRESENT TIME, THERE ARE MORE THAN TWO DOZEN FEDERALLY AUTHORIZED PROJECTS ON THE BOOKS IN MY DISTRICT, ADDRESSING A WIDE RANGE OF NAVIGATION, EROSION CONTROL AND STORM PROTECTION NEEDS.

NATURALLY, I WOULD LIKE TO SUPPORT FUNDING FOR ALL OF THESE PROJECTS, BUT THAT IS NEITHER FAIR NOR REALISTIC IN VIEW OF OUR BUDGET DEFICIT PROBLEMS HERE IN WASHINGTON. ACCORDINGLY, I AM REQUESTING FUNDING ONLY FOR THOSE PROJECTS WHICH REPRESENT THE HIGHEST PRIORITIES IN MY DISTRICT, AND WHICH CANNOT REASONABLY BE DEFERRED AT THIS TIME.

FIVE OF THESE PROJECTS HAVE BEEN RECOMMENDED FOR FUNDING IN THE ADMINISTRATION'S FISCAL 1987 BUDGET REQUEST, AND I AM PLEASED TO SUPPORT THOSE REQUESTS. THE OTHER PROJECTS WHICH I AM SEEKING FUNDING FOR TODAY HAVE BEEN INCLUDED IN THE WATER RESOURCES DEVELOPMENT ACT WHICH PASSED THE HOUSE LAST YEAR, AND NOW SEEMS LIKELYTO BE ENACTED INTO LAW THIS YEAR, IN VIEW OF THE SENATE'S PASSAGE OF SIMILAR LEGISLATION LAST WEEK. HOPEFULLY, THAT WILL CLEAR UP THE QUESTION OF AUTHORIZATION WHICH HAS KEPT THESE AND SO MANY OTHER JOB-INTENSIVE PUBLIC WORKS PROJECTS AROUND THE NATION FROM MOVING FORWARD DURING THE PAST DECADE.

NEW JERSEY INTRACOASTAL WATERWAY: THE FIRST PROJECT I AM SUPPORTING TODAY IS THE NEW JERSEY INTRACOASTAL WATERWAY, WHICH IS THE MAJOR, INLAND COMMERCIAL SHIPPING ROUTE IN OUR STATE. THE ADMINISTRATION'S BUDGET RECOMMENDS $3,290,000 IN OPERATIONS AND MAINTENANCE FUNDING FOR THE ICW NEXT YEAR. THAT IS SUFFICIENT FUNDING TO MEET THE DREDGING NEEDS ALONG THE INLAND WATERWAY. HOWEVER, IT DOES NOT PROVIDE ENOUGH FUNDING FOR THE ARMY CORPS TO COMPLETE THE BANK STABILIZATION PROGRAM IT STARTED SEVERAL YEARS AGO ALONG THE ICW.

THE OPERATIONS OF THE CAPE MAY FERRY AND OTHER COMMERCIAL VESSELS HAVE LED TO SERIOUS EROSION PROBLEMS ALONG THE BANKS OF THE INLAND WATERWAY IN LOWER TOWNSHIP. THE ARMY CORPS HAS EMBARKED ON AN EFFORT TO STABILIZE THE BANKS, AS PART OF ITS OVERALL MAINTENANCE OF THE WATERWAY. I WOULD URGE THE SUBCOMMITTEE TO PROVIDE AN ADDITIONAL $800,000 FOR THIS PURPOSE, BRINGING THE TOTAL FUNDING REQUEST FOR THE ICW TO $4,090,000 FOR FISCAL 1987.

DELAWARE RIVER NAVIGATION STUDY: THE SECOND PROJECT I AM ENDORSING, WHICH IS ALSO INCLUDED IN THE ADMINISTRATION'S BUDGET, IS $850,000 FOR A COMPREHENSIVE DELAWARE RIVER NAVIGATION STUDY. THAT STUDY IS INTENDED TO PROVIDE UP TO DATE DATA ON A NUMBER OF RIVERS IN OUR AREA, INCLUDING THE MAURICE RIVER IN CUMBERLAND COUNTY AND THE SALEM RIVER IN SALEM COUNTY, NEW JERSEY. SPECIFICALLY, THE ARMY CORPS WILL DETERMINE IF THERE IS A NEED TO INCREASE THE AUTHORIZED DEPTH OF THE SALEM RIVER TO 20 FEET AND THE MAURICE RIVER TO 12 FEET. THERE ARE MAJOR COMMERCIAL OPERATIONS LOCATED ALONG BOTH OF THESE RIVERS WHICH ARE SUPPORTING THIS REQUEST, AND IT IS IMPORTANT THAT WE MOVE THIS STUDY FORWARD AS SOON AS POSSIBLE.

SALEM RIVER: IN A SIMILAR REGARD, THE ADMINISTRATION HAS REQUESTED $718,000 IN OPERATIONS AND MAINTENANCE FUNDS FOR THE SALEM RIVER, TO HELP FACILITATE THE OPERATIONS OF THE SALEM PORT. THIS PORT, WHICH JUST OPENED SOME TWO YEARS AGO, IS VERY IMPORTANT TO OUR LOCAL ECONOMY IN SOUTHERN NEW JERSEY, AND ESPECIALLY OUR FARMING COMMUNITY. WE NEED THE DREDGING FUNDS REQUESTED BY THE ADMINISTRATION TO SUPPORT THE COMMERCIAL ACTIVITIES AT THE SALEM PORT.

BARNEGAT INLET: ALSO INCLUDED IN THE ADMINISTRATION'S BUDGET ARE TWO FUNDING REQUESTS FOR BARNEGAT INLET--$6 MILLION FOR CONSTRUCTION OF A NEW SOUTH JETTY, AND $487,000 IN MAINTENANCE FUNDS. I STRONGLY SUPPORT BOTH OF THESE REQUESTS. AS THE SUBCOMMITTEE MAY KNOW, WE RECENTLY REACHED AN ACCEPTABLE COST-SHARING AGREEMENT ON THIS PROJECT WITH THE OFFICE OF MANAGEMENT AND BUDGET AND THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION, AFTER SOME EIGHT YEARS OF NEGOTIATIONS. THE NEW JETTY IS NEEDED TO CORRECT A DESIGN DEFICIENCY IN THE EXISTING PROJECT AND TO STABILIZE THIS DANGEROUS WATERWAY, WHICH IS THE BUSIEST COMMERCIAL NAVIGATION CHANNEL IN THE STATE.

COLD SPRING INLET: THE LAST PROJECT I AM SEEKING FUNDING FOR WHICH IS INCLUDED IN THE PRESIDENT'S BUDGET IS COLD SPRING INLET. THIS IS THE WATERWAY WHICH SERVES THE U.S. COAST GUARD TRAINING CENTER IN CAPE MAY COUNTY. THIS FACILITY IS THE COAST GUARD'S ONLY RECRUIT TRAINING CENTER IN THE COUNTRY. MOREOVER, THE COAST GUARD CARRIES OUT A WIDE RANGE OF ACTIVITIES IN OUR AREA, INCLUDING SEARCH AND RESCUE MISSIONS, DRUG INTERDICTION, AND ENFORCEMENT OF THE OCEAN DUMPING AND 200-MILE FISHING LAWS. IT IS IMPERATIVE THAT COLD SPRING INLET BE MAINTAINED PROPERLY TO SUPPORT THE ACTIVITIES OF THE COAST GUARD. THE ADMINISTRATION HAS REQUESTED $122,000 FOR THIS PURPOSE, WHICH IS AN ADEQUATE FUNDING LEVEL, AND I AM PLEASED TO SUPPORT THAT REQUEST.

CAPE MAY INLET TO LOWER TOWNSHIP: THE FIRST PROJECT I AM SUPPORTING WHICH WAS NOT IN THE PRESIDENT'S BUDGET IS ALSO TIED TO THE COAST GUARD TRAINING CENTER. THAT IS THE SO-CALLED CAPE MAY INLET TO LOWER TOWNSHIP PROJECT. IT IS A MITIGATION PROJECT, DESIGNED TO CORRECT A SERIOUS EROSION AND FLOODING PROBLEM WHICH WAS CAUSED BY THE FEDERAL GOVERNMENT'S CONSTRUCTION OF THE NEARBY COLD SPRING JETTIES.

MR. CHAIRMAN, I HAVE INDICATED TO THIS SUBCOMMITTEE BEFORE, AND WILL REPEAT NOW, THAT WE ARE COURTING A MAJOR DISASTER BY DELAYING THE CONSTRUCTION OF THIS PROJECT. THE COAST GUARD FACILITY REPRESENTS A FEDERAL INVESTMENT IN EXCESS OF ONE HUNDRED MILLION DOLLARS. RIGHT NOW, THAT INVESTMENT IS VULNERABLE TO THE SEA. BEACH EROSION HAS ALREADY CLAIMED THE HELICOPTER LANDING PAD, AND IS STEADILY APPROACHING THE MAIN FACILITY. IT IS ONLY A MATTER OF YEARS NOW BEFORE THE COAST GUARD BASE IS GOING TO BE SERIOUSLY DAMAGED OR DESTROYED IN A STORM, UNLESS WE ACT NOW TO STABILIZE THE SHORELINE.

IN PAST YEARS, MY EFFORTS TO FUND THIS IMPORTANT PROJECT HAVE BEEN STYMIED BY THE LACK OF AUTHORIZATION. FOR THAT REASON, I AM EXTREMELY PLEASED THAT BOTH THE HOUSE AND SENATE HAVE VOTED TO AUTHORIZE THE CONSTRUCTION OF THIS PROJECT, AS PART OF THE WATER RESOURCES DEVELOPMENT ACT. I MIGHT ADD THAT BOTH THE HOUSE AND SENATE BILLS PROVIDE FOR THE CONSTRUCTION OF THE NAVIGATION PROJECT IN CAPE MAY AND ADDITIONAL STORM PROTECTION MEASURES IN LOWER TOWNSHIP AND CAPE MAY POINT. AS A RESULT, CLEAR AUTHORIZATION WILL BE FORTHCOMING FOR A COMPREHENSIVE EROSION CONTROL AND STORM PROTECTION PROJECT FROM CAPE MAY INLET TO LOWER TOWNSHIP, AS SOON AS THE WATER RESOURCES BILL IS SIGNED INTO LAW.

ALL OF THE STUDIES AND ENGINEERING AND DESIGN WORK HAVE BEEN COMPLETED ON THIS PROJECT. IT HAS BEEN PROVEN TO BE ENVIRONMENTALLY SOUND, COST-EFFECTIVE AND ECONOMICALLY JUSTIFIED. THE PROJECT HAS THE STRONG SUPPORT OF THE COAST GUARD AND THE LOCAL COMMUNITIES. THE ARMY CORPS NEEDS $913,000 TO BEGIN CONSTRUCTION OF THIS PROJECT, AND I WOULD URGE THE SUBCOMMITTEE TO PLEASE SUPPORT THIS REQUEST, SO WE CAN PUT IN PLACE THOSE MEASURES WHICH ARE NEEDED TO PROTECT THE COAST GUARD BASE AND SURROUNDING COMMUNITIES.

INTRACOASTAL WATERWAY STUDY: THE NEXT PROJECT I AM SUPPORTING IS $100,000 FOR THE ARMY CORPS TO SURVEY APPROXIMATELY 2,000 FEET OF THE INTRACOASTAL WATERWAY IN THE VICINITY OF CAPE MAY HARBOR. MOST OF THE MAJOR COMMERCIAL FISHING VESSELS IN CAPE MAY COUNTY ARE LOCATED ALONG THIS STRETCH OF THE ICW. IN RECENT YEARS, THESE VESSELS HAVE BEGUN TO DEVELOP SIZEABLE MARKETS OVERSEAS FOR SO-CALLED UNDERUTILIZED SPECIES—PRODUCTS LIKE SQUID WHICH ARE HIGHLY VALUED IN FOREIGN COUNTRIES BUT HAVE LITTLE MARKET IN THE UNITED STATES. TO HELP MEET THE DEMANDS OF THESE NEW MARKETS, THE LOCAL FISHERMEN HAVE BEGUN BUILDING LARGER VESSELS WHICH REQUIRE A DEEPER DRAFT. THE SURVEY I AM REQUESTING IS NEEDED TO

DETERMINE IF IT WOULD BE JUSTIFIED TO DEEPEN THIS SMALL SECTION OF THE INLAND WATERWAY, TO SUPPORT THE COMMERCIAL FISHING INDUSTRY IN CAPE MAY COUNTY.

GREAT EGG HARBOR INLET AND PECK BEACH: I WOULD ALSO URGE THE SUBCOMMITTEE TO APPROPRIATE $132,000 TO RESUME THE ADVANCED ENGINEERING AND DESIGN WORK ON A NAVIGATION AND FLOOD DAMAGE PREVENTION PROJECT IN CAPE MAY COUNTY WHICH ENCOMPASSES GREAT EGG HARBOR INLET AND PECK BEACH. THIS PROJECT WAS PUT ON THE BACK BURNER IN THE MID-1970'S, WHEN THE STATE WITHDREW ITS SUPPORT BECAUSE THE PROJECT WAS TOO EXPENSIVE. HOWEVER, THERE HAVE BEEN SOME NEW DEVELOPMENTS IN THE LAST TWO YEARS WHICH HAVE RESULTED IN THE STATE MAKING THIS ONE OF ITS TOP PRIORITY PROJECTS, ALONG WITH THE CAPE MAY PROJECT.

IN ESSENCE, THE STATE CONDUCTED AN EXTENSIVE STUDY OVER THE LAST 24 MONTHS, TO DETERMINE IF THE GREAT EGG HARBOR INLET PROJECT COULD BE REDESIGNED TO ELIMINATE ALL OF THE JETTIES AND OTHER STRUCTURES. AS A RESULT OF THAT STUDY, THE STATE NOW VIEWS THE GREAT EGG HARBOR PROJECT AS THE LEADER OF A NEW GENERATION OF NON-STRUCTURAL, MODERATELY PRICED, ENVIRONMENTALLY SOUND PROJECTS TO GUARD AGAINST STRUCTURAL DAMAGE CAUSED BY TIDAL-INDUCED EROSION ALONG PUBLIC SHORELINES.

THIS IS THE SAME APPROACH WHICH THE HOUSE OF REPRESENTATIVES APPROVED LAST YEAR AS PART OF THE WATER RESOURCES DEVELOPMENT ACT. IN THAT BILL, THE HOUSE ADOPTED LANGUAGE I DEVELOPED WHICH AUTHORIZES THE ARMY CORPS TO SEPARATE THE STRUCTURAL AND NON-STRUCTURAL ASPECTS OF THE GREAT EGG HARBOR RIVER AND THREE OTHER PROJECTS IN NEW JERSEY. THE IDEA BEHIND THIS APPROACH IS TO DEVELOP PROJECTS WHICH MEET THE NAVIGATION AND FLOOD CONTROL NEEDS ALONG OUR WATERWAYS, WITHOUT THE HIGH COSTS AND ENVIRONMENTAL RISKS ASSOCIATED WITH JETTIES AND OTHER STRUCTURES. I AM HOPEFUL THAT THIS APPROACH WILL PROVE SUCCESSFUL WITH THE GREAT EGG HARBOR RIVER PROJECT, WHICH THE STATE SELECTED AS ITS PILOT PROJECT, AND THAT IT CAN LATER BE APPLIED TO OTHER COASTAL AREAS AROUND THE COUNTRY.

DELAWARE BAY FLOOD CONTROL PROJECTS: THE LAST PROJECT WHICH I AM SEEKING FUNDING FOR TODAY INVOLVES THE CONSTRUCTION OF LOW-COST, DEMONSTRATION FLOOD CONTROL PROJECTS IN SIX COMMUNITIES ALONG THE DELAWARE BAY. THEY ARE: ELSINBORO IN SALEM COUNTY; FORTESCUE, GANDYS BEACH AND SEA BREEZE IN CUMBERLAND COUNTY; AND REEDS BEACH AND PIERCES POINT IN CAPE MAY COUNTY. I AM REQUESTING $500,000 FOR THE ARMY CORPS TO DEVELOP THE FINAL DESIGN AND BEGIN CONSTRUCTION OF THESE PROJECTS.

BRIEFLY, THESE PROJECTS DATE BACK TO A STUDY WHICH THE ARMY CORPS CONDUCTED IN THE 1960'S, WHICH CONCLUDED THAT MANY COMMUNITIES ALONG THE DELAWARE BAY SUFFER FROM SERIOUS FLOOD CONTROL PROBLEMS, AND ARE IN NEED OF FEDERAL ASSISTANCE. SINCE THEY ARE SMALL COMMUNITIES, THE STUDY RECOMMENDED THAT SPECIAL, LOW-COST FLOOD CONTROL PROJECTS BE DESIGNED WHICH ARE INDIVIDUALLY TAILORED TO THE NEEDS OF EACH MUNICIPALITY. IN RESPONSE TO THAT STUDY, CONGRESS FUNDED SIX DEMONSTRATION PROJECTS ALONG THE DELAWARE BAY WHICH HAVE PROVEN TO BE QUITE SUCCESSFUL.

UNFORTUNATELY, ALL SIX PROJECTS WERE CONSTRUCTED ON THE DELAWARE SIDE OF THE BAY. I HAVE BEEN WORKING SINCE I FIRST CAME TO CONGRESS IN 1975 TO FUND SIX COMPARABLE PROJECTS ON THE NEW JERSEY SIDE OF THE BAY, WHERE OUR COMMUNITIES ARE BEING RIPPED APART EACH YEAR BY FLOODING. THE HOUSE HAS VOTED TO AUTHORIZE THE CONSTRUCTION OF THESE PROJECTS AS PART OF THE WATER RESOURCES DEVELOPMENT BILL, AND I WOULD URGE THE SUBCOMMITTEE TO PLEASE PROVIDE THE FUNDING WHICH IS NEEDED TO MOVE THESE PROJECTS TO CONSTRUCTION.

THAT CONCLUDES MY PREPARED TESTIMONY. I WOULD BE PLEASED TO ANSWER ANY QUESTIONS THE SUBCOMMITTEE MAY HAVE AT THIS TIME. THANK YOU VERY MUCH.

# # # #

Mr. BEVILL. We have no questions. Certainly we will work with you and we will do the best we can to accommodate you.

Mr. HUGHES. I know that, and I don't envy you the tremendous problems that you have. I am sure they are all worthy projects.

I have endeavored to scale my projects back, I really have.

Mr. MYERS. We appreciate that. Thank you, Bill.

TUESDAY, APRIL 15, 1986.

ALTERNATIVE ENERGY

WITNESSES

HONORABLE DANIEL K. AKAKA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF HAWAII

PATRICK TAKAHASHI, DIRECTOR, HAWAII NATURAL ENERGY INSTITUTE

LOUIS ROTUNDO, ASSISTANT TO THE DIRECTOR, FLORIDA SOLAR ENERGY CENTER

Mr. BEVILL. Next we have our good friend and colleague, Congressman Danny Akaka. We are pleased to have you here. Your prepared statement will be made part of the record. You may proceed as you wish.

Mr. AKAKA. Thank you very much, Mr. Chairman, and members of the subcommittee.

I appreciate this opportunity to come before you again to discuss renewable energy. This is important to Hawaii and our Nation.

In my prepared statement, I have discussed a number of important energy research and development activities. At this time, I would like to give you some highlights on just a few of these programs.

With me today is Dr. Patrick Takahashi, Director of the Hawaii Natural Energy Institute. Dr. Takahashi is no stranger to the halls of Congress, since he served as Special Assistant on Energy for Senator Spark Matsunaga from 1979 to 1982.

Also with me today is Mr. Louis Rotundo of the Florida Solar Energy Center. Both these gentlemen have distinguished backgrounds in the field of renewable energy research and development, and I commend their statements to you.

I also have with me today a statement prepared by Hawaiian Electric Company in support of continued funding of the MOD-5B wind turbine, and would appreciate it if Hawaiian Electric's statement could be included in the hearing record.

Before I begin my remarks, Mr. Chairman, I want to express my sincere appreciation for the leadership this subcommittee demonstrated in overturning the Administration's proposed deferral of funds for solar and renewable energy research. My special thanks go to you, Mr. Chairman, who offered the amendment during the markup of the Urgent Supplemental Appropriations Bill.

I have four programs to talk about, and I will give you the highlights of them.

I am grateful for all the support that this subcommittee has given the OTEC program throughout the years. I can say without reservation that if it were not for your support, there would be no meaningful OTEC research program today.

Last year, this subcommittee launched a bold new OTEC research initiative that promises to become the centerpiece of the Department of Energy's oceans programs. The Energy and Water Development Appropriations Bill for fiscal year 1986 contained first year funding for the Pacific International Center for High Technology Research (PICHTR) OTEC project. One of the most attractive features of the PICHTR-OTEC project is that it offers the unique opportunity to obtain one-for-one cost sharing for a major oceans energy research project.

It is now up to the Federal government to satisfy its international obligation to provide the U.S. contribution to the PICHTR project. To accomplish this, we are asking for $4.2 million for OTEC research in fiscal year 1987, of which $2 million should be specifically identified for the PICHTR project. This request is substantially below last year's appropriation of $5 million and is also well below the historic funding level for OTEC.

Mr. Chairman, in fiscal year 1987 we have the opportunity to complete what for many years has been the centerpiece of DOE's wind program—the MOD-5B wind turbine. Assuming that final approval is given to the provision contained in the Urgent Supplemental which disapproves the deferral of solar and renewable energy research funds, only $4.5 million will be needed in fiscal year 1987 to complete the MOD-5B program.

That program will culminate over seven years of research on large-scale wind generators. Like the many individuals who have supported this project through the years, I look forward to the day when the blades of the MOD-5B turbine make their first turn and begin generating electricity for Oahu. That day will mark a true milestone for wind energy in the United States and for Hawaii's efforts to achieve greater energy self-sufficiency.

I am certain that there will be a ceremony in Hawaii to honor the completion of the MOD-5B program, and I hope the members and staff of this subcommittee will consider traveling to Hawaii to take part in this great event. Without the strong support you have given this project through the years, this achievement would not have been possible.

Mr. Chairman, during the last district work period I visited the project and it is really a tremendous project and I would like to see it completed with the requested funds.

The third program is the Hawaii Biofuels program. In last year's Energy and Water Development Appropriations Bill, the subcommittee made $500,000 available to begin the Hawaii Biofuels program at the University of Hawaii. I cannot emphasize enough how valuable this program will be to addessing two of our highest priority concerns in Hawaii—achieving greater energy self-sufficiency and finding suitable crops for the over 100,000 acres of abandoned sugar cane and pineapple lands and underutilized grazing and forestland.

To carry out the activities of the Hawaii Biofuels program in fiscal year 1987, an appropriation of $500,000 is requested. This is the same amount that the subcommittee provided in the current fiscal year.

The last program I want to talk about, Mr. Chairman, is the Hydrogen Research program.

In fiscal year 1985, Congress made $500,000 available for a technology status assessment of producing hydrogen from renewable energy. Some of these funds have been used by the University of Hawaii to conduct a technology assessment which evaluates the potential of producing hydrogen as a renewable fuel and identifies the technologies and research needed to expand production of hydrogen fuel.

The assessment project started in 1985 and a final report is due in September of 1986.

We are now at a point where research is necessary if we are to make an efficient transition to hydrogen fuels. I recommend that $1.2 million be provided in fiscal year 1987 to undertake the high priority research projects identified in Hawaii Natural Energy Institute's hydrogen technology assessment.

Mr. Chairman, that concludes my statement. Thank you for your consideration of these important matters.

And I would like to then have my friends here from Hawaii and Florida testify before you.

[The statement of Mr. Akaka follows:]

STATEMENT BY THE HONORABLE
DANIEL K. AKAKA
BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON
ENERGY AND WATER DEVELOPMENT
APRIL 15, 1986

Mr. Chairman and members of the Subcommittee on Energy and Water Development, I appreciate the opportunity to appear before you once again to present testimony on renewable energy research of importance to Hawaii and the nation. I would like to discuss a number of important energy research and development activities--OTEC, the Hawaii Deep Water Cable Program, the MOD-5B wind turbine project, and the Hawaii biofuels program.

Before I begin my remarks, I want to express my sincere appreciation for the leadership this Subcommittee demonstrated in overturning the administration's proposed deferral of funds for solar and renewable energy research. My special thanks go to Chairman Bevill who offered the amendment during the mark-up of the Urgent Supplemental Appropriations Bill. The Committee's action will ensure that many important alternative energy research projects funded by Congress in fiscal year 1986 will not be abruptly terminated.

OTEC

Mr. Chairman, I am grateful for all the support that this Subcommittee has given to the OTEC program throughout the years. I can say without reservation that if it were not for your support, there would be no meaningful OTEC research program today.

Last year, this Subcommittee launched a bold new OTEC research initiative that promises to become the centerpiece of the Department of Energy's oceans program. The Energy and Water Development Appropriations Bill for FY 1986 contained first year funding for the Pacific International Center for High Technology Research (PICHTR) OTEC project. The goal of PICHTR is to develop a large-scale internationally cost-shared open-cycle research project that represents the state-of-the-art of OTEC technology and the knowledge we have gained from many years of OTEC research. One of the most attractive features of the PICHTR-OTEC project is that it offers the unique opportunity to obtain one-for-one cost sharing for a major oceans energy research project which is consistent with DOE's long-term program goals.

I know that some of the Members and staff of this Subcommittee met with the Japanese delegation that traveled to Washington to assess our government's commitment to jointly sponsor the PICHTR-OTEC project. You will be happy to know that on the basis of their findings during their visit to Washington, the delegation intends to recommend that the Japanese government fund its share of the PICHTR-OTEC project. This is a very promising development.

It is now up to the federal government to satisfy its international obligation to provide the U.S. contribution to the PICHTR project. To accomplish this, we are asking for $4.2 million for OTEC research in fiscal year 1987, of which $2 million should be specifically identified for the PICHTR project. This request is substantially below last year's appropriation of $5 million and is also well below the historic funding level for OTEC.

HAWAII DEEP WATER CABLE PROGRAM

The Hawaii Deep Water Cable (HDWC) program is a jointly funded effort by the Department of Energy and the State of Hawaii to determine the technical feasibility of installing and operating a high voltage submarine cable between the highly promising geothermal sites located on the Island of Hawaii and the principal electric demand centers on the Island of Oahu.

As you may recall, the supporters of the cable project have been concerned because it appeared that the Department of Energy was prepared to allow its program contract with Hawaiian Electric Company to expire on March 31. I am happy to report that, thanks to this Subcommittee's support, the department has granted a three month extension to the HDWC contract and has agreed in principle to modify and grant a long-term extension of the current contract. It is expected that changes agreed to by the department and Hawaiian Electric will result in $7 million in savings from the statement of work required by the original contract.

The HDWC program presents a unique challenge. The geography and hydrography of the Hawaiian Islands and its surrounding waters require the development of a high voltage submarine cable that is capable of being deployed in depths up to 7,000 feet and over distances of 150 miles. Although submarine power cables have been deployed successfully in other parts of the world, none come close to meeting the requirements of the HDWC. Before the private sector spends an estimated $1.5 billion to fully develop the geothermal resources on the Big Island, and before $500 million is spent to develop a commercial cable system, far more must be learned about submarine cables and the equipment needed to deploy and retrieve them.

Hawaii's needs for cable technology coincide with the strong national interest in promoting the development of a high voltage submarine cable industry. Only a handful of manufacturers compete for the world's high voltage submarine cable market. Given the strong market for this technology in Hawaii, the HDWC program offers an excellent opportunity for the United States to establish itself at the forefront of this science.

Prior Appropriations for the HDWC and the FY 1987 Request

Mr. Chairman, it has not been necessary to provide funds for the HDWC program since fiscal year 1984 when $4.8 million was appropriated. Since that time, the funds you provided have been wisely spent.

By the end of this fiscal year, the project sponsors expect to complete the fabrication of the 6,000 foot laboratory test cable, collect and analyze all the necessary ocean engineering data, and complete the conceptual design work for the cable's at-sea test. Nearly 300 potential cable designs were reviewed before the final selection of the present cable design.

For fiscal year 1987, $3.7 million is necessary for program activities of the HDWC project. The major program activities to be undertaken in fiscal year 1987 include conducting an exhaustive battery of laboratory tests on the cable, designing the necessary cable handling equipment and preparing the protocal for the at-sea test. A detailed budget justification for the project is as follows:

Hawaii Deep Water Cable Program
FY 1987 Request

Conduct Cable Qualification & Laboratory Tests	$1,500,000
Cable Handling Equipment Design	207,000
Control & Vessel Operating Equipment Design	511,000
Vessel Selection, Survey & Design	398,000
Test Planning & At-Sea Test Protocal	284,000
Engineering Analysis	379,000
Program Management	300,000
Technical Support	121,000
	$3,700,000

The laboratory test program consists of a year-long series of electrical and mechanical tests designed to verify the performance of the prototype cable. The tests are intended to simulate as nearly as possible in a laboratory setting the conditions that will be encountered during deployment and commercial operation of the cable over a period of thirty years. A total of twenty-one individual and sequential tests will be conducted on segments of the 6,000 foot laboratory test cable. The results of these tests will fully characterize the performance of the cable and will provide unprecedented amounts of data regarding the design and performance of high voltage submarine cables.

A portion of the FY 1987 budget will also be used to prepare final designs for the cable handling equipment and the vessel control and operation systems that will be used in the at-sea tests. The enormous depths and adverse weather conditions in the Alenuihaha Channel impose handling, equipment, and vessel control requirements that have not been encountered in any previous submarine cable installation. The design of this equipment and the development of vessel and equipment control systems are a major element in the demonstration of commercial feasibility.

MOD-5B WIND TURBINE PROGRAM

Mr. Chairman, in fiscal year 1987 we have the opportunity to complete what for many years has been the centerpiece of DOE's wind program--the MOD-5B wind turbine. Assuming that final approval is given to the provision contained in the Urgent Supplemental which disapproves the deferral of solar and renewable research funds, only $4.5 million will be needed in fiscal year 1987 to complete the MOD-5B program.

The MOD-5B is a 3.2 megawatt wind turbine with a 320 foot rotor diameter. It is being designed and constructed by the Boeing Company under contract to NASA through a NASA/DOE interagency agreement. Hawaiian Electric Industries has contracted to purchase the MOD-5B upon completion of installation and testing.

At the present time, the 190 foot tower upon which the rotor and the nacell will rest has been erected at the Kahuku Point wind farm, the substation and the interconnecting transmission lines are in place, all site preparation work has been finished, and the procurement and fabrication of all major system components have been successfully completed.

The MOD-5B program will culminate over seven years of research on large-scale wind generators. Like the many individuals who have supported this project through the years, I look forward to the day when the blades of the MOD-5B turbine make their first turn and begin generating electricity for Oahu. That day will mark a true milestone for wind energy in the United States and for Hawaii's efforts to achieve greater energy self-sufficiency. I am certain that there will be a ceremony in Hawaii to honor the completion of the MOD-5B program, and I hope the members and staff of this Subcommittee will consider traveling to Hawaii to take part in this great event. Without the strong support you have given this project through the years, this achievement would not have been possible.

HAWAII BIOFUELS PROGRAM

In last year's Energy and Water Development Appropriations Bill, the Subcommittee made $500,000 available to begin the Hawaii Biofuels Program at the University of Hawaii. I cannot emphasize enough how valuable this program will be to addressing two of our highest priority concerns in Hawaii--achieving greater energy self-sufficiency and finding suitable crops for the over 100,000 acres of abandoned sugarcane and pineapple lands and underutilized grazing and forestland.

There is a compelling need in the State of Hawaii to develop alternative energy resources to replace our excessive dependence upon imported oil and take advantage of idle sugarcane acreage. The future of American farms, including Hawaii's sugar plantations, will continue to face economic uncertainty unless innovative means can be developed to improve profitability. Alcohol, particularly methanol, and chemicals can serve as bridges to greater economic stability.

Unfortunately, although funds have been available to the department for the Hawaii Biofuels Program since November 1, 1985, these funds have not been released. With the help of this Subcommittee, however, I am confident that we can resolve this dispute and allow this important work to go forward.

The long-term objective of this research program is to develop Hawaii's biomass resources to provide the major portion of the liquid and gaseous fuels required to meet Hawaii's future needs. Furthermore, the methodology we will use and the technology we will develop will have a direct transfer to the entire Pacific Basin.

A near-term objective is to provide biomass fuel for existing boilers currently in use to supply electric power to the utility grids of the Hawaiian islands. This objective can be met by tree and herbaceous plant crops to serve as solid fuel for boilers, or by gassification of woody biomass or bagasse to provide medium-BTU gas.

Some of the major activities to be undertaken through this research are as follows:

** Completing a Biomass Resource Assessment: This element of the program will make available to planners and decision makers the information needed to plan for large-scale biomass production. This program element includes the development of a land resources data bank, a computer model to provide expected biomass yields for selected crops, and an economic model of energy plantation operations.

** Biomass Production and Harvesting Research: Through production and harvesting research, the program will develop ways to optimize biomass yields from selected fast-growing species of trees and herbaceous plants in Hawaii. Three separate, but related, experiments will be carried out in a cooperative manner by the Hawaii Natural Energy Institute, the College of Tropical Agriculture, the Hawaiian Sugar Planters' Association, the State Department of Planning and Economic Development and a number of Hawaii's farms and plantations.

** Biomass Conversion Research: This element of the program will determine the technical and economic feasibility of producing liquid and gaseous fuels from biomass in Hawaii. The proposed research comprises two primary efforts, a pilot project to convert biomass to liquid hydrocarbon fuels, and applied research on pyrolysis reactions that will enable designers to engineer pyrolysis reactions to achieve selectively desired products.

To carry out the activities of the Hawaii Biofuels Program in fiscal year 1987, an appropriation of $500,000 is necessary. This is the same amount that the Subcommittee provided in the current fiscal year.

HYDROGEN RESEARCH

In fiscal year 1985, Congress made $500,000 available for a technology status assessment of producing hydrogen from renewable energy. Some of these funds have been used by the University of Hawaii to conduct a technology assessment which evaluates the potential of producing hydrogen as a renewable fuel and identifies the technologies and research needed to expand production of hydrogen fuel. The assessment project started in 1985 and a final report is due in September of 1986.

Hawaii has long been recognized as a leader in developing and utilizing renewable energy technology, due to a concerted effort to lessen our heavy dependence on imported petroleum. Our state leads the nation in the production of electrical power through renewable energy. Since renewable energy resources are viewed as primary energy sources for converting hydrogen from its natural state into hydrogen fuels, Hawaii can play a central role in planning for a new era of hydrogen fuels.

It is inevitable that hydrogen will become the fuel of choice to satisfy a wide variety of the world's energy needs. The current estimate by the Institute of Gas Technology is that all proven fossil fuel resources will be exhausted by the middle of the next century. For this reason, it is essential that we make the transition to hydrogen fuels.

One recent event which will surely spur the development of hydrogen fuels is the federal government's research on the hydrogen-powered "trans-atmospheric vehicle" which could take off from airports on the east coast, climb 70 miles to the fringes of space, achieve a speed in excess of Mach 5, and reach Tokyo in under three hours.

We are now at a point where research is necessary if we are to make an efficient transition to hydrogen fuels. I recommend that $1.2 million be provided in fiscal year 1987 to undertake the high priority research projects identified in the Hawaii Natural Energy Institute's hydrogen technology assessment.

Mr. Chairman, that concludes my statement. Thank you for your consideration of these important matters.

Mr. **Bevill**. Your statements will be made a part of the record. You may summarize briefly.

Mr. **Takahashi**. Yes, sir, Mr. Chairman.

First of all, I would like to applaud the sound decisions you and the committee have made in preserving the elements of our national program. The wisdom and courage you have exhibited are both correct and courageous.

I would like to leave one idea with you, and that is for you to seriously consider about what can be done for looking out for future transportation fuel alternatives.

Congressman Akaka's statement closely reflects mine, so I will just quickly summarize by mentioning three projects that I would like for you to consider for funding.

These I will refer to as transportation fuel options. One is the Hawaii Biofuels program to develop a renewable methanol option, second a program on hydrogen research, and the third is a total systems ocean resources program.

In the latter two programs, the hydrogen and OTEC projects, a partnership has been initiated between Florida and Hawaii for the national good.

Details on that are in the record now and I thank you very much.

[The statement of Mr. Takahashi follows:]

TESTIMONY ON
ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL FOR FY 1987

PRESENTED BEFORE THE

U.S. HOUSE OF REPRESENTATIVES

APPROPRIATIONS COMMITTEE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

April 15, 1986

Patrick K. Takahashi, Director
Hawaii Natural Energy Institute

HNEI

UNIVERSITY OF HAWAII
1907

Mr. Chairman and members of the Subcommittee, my name is Patrick Takahashi and I am Director of the Hawaii Natural Energy Institute (HNEI) and Professor of Engineering at the University of Hawaii. I also serve as Chairman of the Energy and Resources Division of the Pacific International Center for High Technology Research. Brochures describing these organizations are attached to my testimony.

First of all, I wish to applaud the sound decisions you have made in preserving the necessary elements of our national energy program. The wisdom and vision you are continuing to display are both correct and courageous.

Energy plays a much more important role in our economy than most people realize. The gas lines and double-digit inflation are now only bare memories...but we easily forget how our entire economic system was traumatized and national security compromised. These same effects will almost surely someday return to haunt us...unless steps are taken today to preclude future insults and inconveniences. The recent decline in oil prices has decreased the rate of inflation, spurred business recovery, and in reality, given us a reprieve period for our nation to prepare more wisely this time.

The unsettling bottom line is that no one can predict the price of oil. Chevron USA last year reported that our country would in the Year 2000 be using as much oil as we were in 1973 at the time of the first oil crisis, BUT IMPORTING MUCH MORE THAN IN 1973, AND MOST PROBABLY PRIMARILY FROM THE MIDDLE EAST.

A second point I wish to make is the need to look closer at our national needs. Much of the energy research and development--nuclear, geothermal, solar photovoltaics, hydroelectric--has been focused on electricity. While we need to continue basic research on many of these technologies, the worry I have pertains to transportation fuel options.

In Hawaii, for example, which is representative of many nations throughout the world, transportation fuels account for more than fifty percent of energy consumption. These fuels today are largely controlled by the OPEC nations. Sure, OPEC is in a state of disarray today, planned or not. Soon, and certainly before the 21st Century, which is less than 14 years away, something will happen. It is today that we need to become serious about our looming transportation fuel problem, not when it is too late.

Your Subcommittee, over the past couple of years, has appropriated funds for three programs in particular which I wish to provide commentary. Each program has transportation fuel implications, and every one while some number of years away from large-scale commercialization, could have enormous big payoff national implications.

Last year a sum of half a million dollars was earmarked for the Hawaii Biofuels Program. This effort will develop bioconversion techniques for an intermediate methanol economy. I am enclosing a copy of proceedings from a workshop held on this subject. In many areas of the USA and world, there is sufficient renewable biomass to supply the feedstock for methanol production processes which can supply 100% the ground transportation requirements of the community.

HNEI recently, together with Stone & Webster for the Solar Energy Research Institute, participated in a three part $500,000 study to determine the most cost effective way to convert biomass into alcohol. Enzymatic and acid hydrolysis into ethanol and gasification/enhancement into methanol were reviewed. The methanol concept was the overwhelming choice. It is my understanding that Ford Motor Company will this next year be producing up to 100,000 vehicles with a simple switch to use gasoline or methanol.

We recommend that your Subcommittee provide a continuing sum of $1/2 million to the Hawaii Biofuels Program to follow-up on Phase One. The focus should be on how best to convert biomass into methanol. In addition, an option should be provided to investigate the conversion of sugar to energy and/or chemical plantations. The work to be accomplished will have applications to other sites throughout the nation faced with traditional farming woes and contemplating alternative transportation fuels.

The second program is a longer term transportation option--hydrogen. HNEI and the Florida Solar Energy Center are close to completing for the Department of Energy a technology status assessment of hydrogen from renewable energy. A copy of a recent paper on the subject is attached. In a House hearing held last month on H.R. 3899, the Hydrogen Research and Development Act, it became clear that the National Aeronautics and Space Administration was bullish on hydrogen and had significantly increased funding for hydrogen research over the past five years. However, the Department of Energy, in the same period, had decreased its effort. All this made no real sense in view of the hearing subcommittee because the problem was not in utilizing hydrogen, but in producing it cost effectively. There was no question about hydrogen being the ideal fuel for aviation and space travel. The real problem was in the efficient generation of hydrogen, the responsibility of the USDOE.

Our second recommendation, then, is for your Subcommittee to provide increasing R&D funds to the Department of Energy for developing techniques to produce hydrogen in an environmentally acceptable and potentially economically attractive means. A sum of $1,200,000 to support the high priority basic research targets determined by the HNEI/FSEC study for the Solar Energy Research Institute would be an excellent beginning to turn around the depressed funding situation.

The third program is a total system ocean resources program that has international implications and reverse technology transfer possibilities with Japan. Congress last year passed an energy appropriations bill which identified $500,000 to initiate an international open-cycle OTEC program under the leadership of the Pacific International Center for High Technology Research (PICHTR).

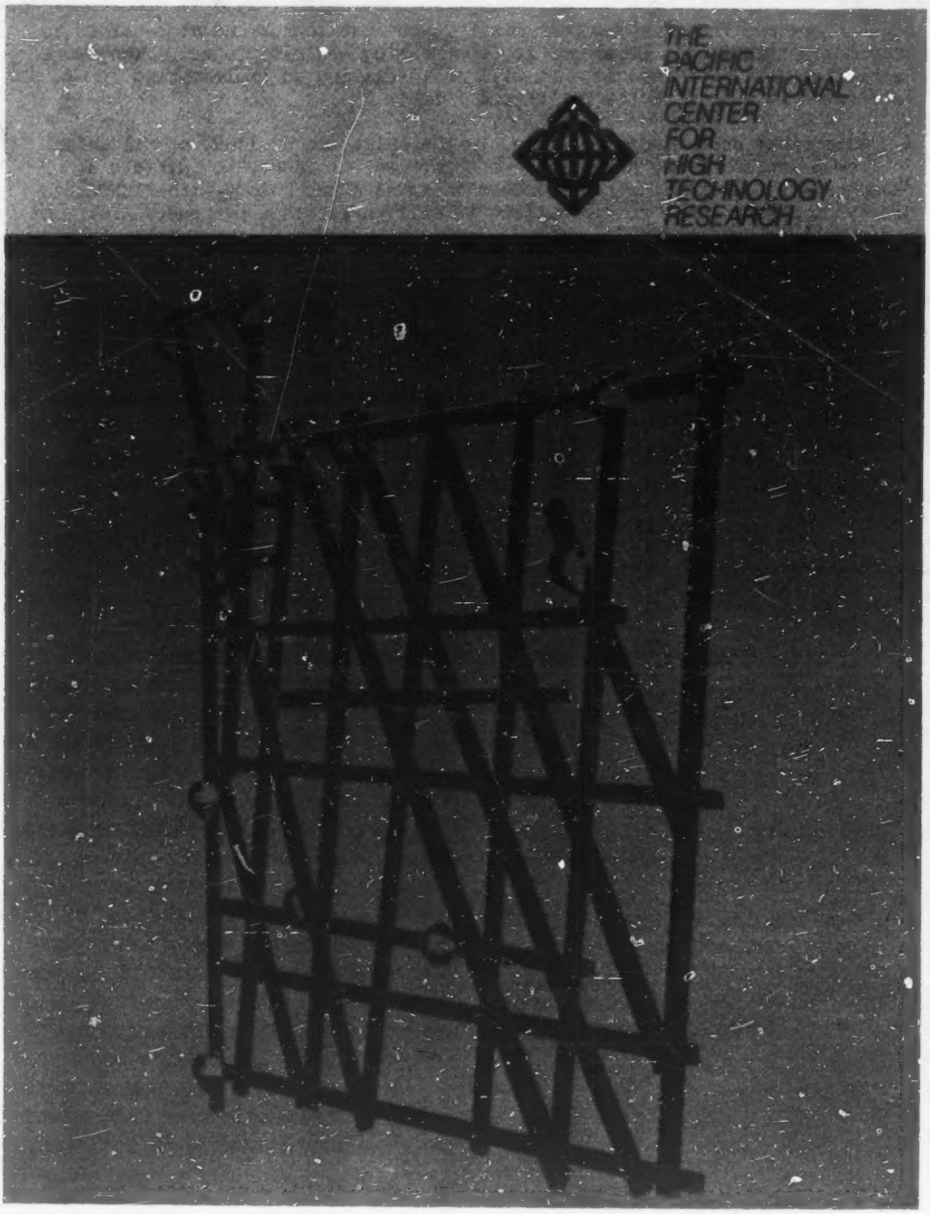
In partnership with the USDOE, PICHTR has proposed a $26 million 165 kilowatt OC-OTEC experiment to produce electricity, freshwater, agri-aquacultural co-products, and future ties to seabed mining processing, hydrogen and methanol fuel production and other marine applications. Our initial plans call for Hawaii and other private sector organizations to provide the majority of funds for an $8 million cold water pipe and interface system, Japan to supply a state-of-the-art turbine worth at least $8 million, and the USDOE to follow-through on its Multi-Year Plan to supply the hardware for the remaining portion of the system.

A Japanese fact-finding team visited you last month, and also talked to the Administration on prospects for cooperating on this project. They were satisfied with the response, and will be initiating an implementing agreement to work with the USA through PICHTR.

Our final recommendation, then, in the spirit of S. 1109, a bill which has been introduced to authorize the Department of Energy to initiate a cooperative research program in ocean energy and technology with PICHTR, is for your Subcommittee to appropriate $2 million for this purpose. A copy of this bill is attached.

In closing, I would like to again underscore the need for a continuing Federal program in energy research and development. Increasing priority should be placed on transportation fuels, and where possible, Federal funds should be leveraged with interested corporate, local government and allied government monies. Hawaii is an excellent test tube site to conduct research on biofuels, hydrogen from renewable energy and ocean resources, for our natural conditions to initiate and bring these technologies to the marketplace cannot be matched anywhere else in the world.

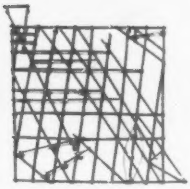
Thank you for giving me the opportunity to testify.



THE
PACIFIC
INTERNATIONAL
CENTER
FOR
HIGH
TECHNOLOGY
RESEARCH

On the Cover

Ancient skills meet modern technology
— a computerized view of a South Pacific
ocean navigation stick-chart.
It was produced for this booklet by
the Honolulu engineering and surveying firm,
Sam O. Hirota, Inc.



PACIFIC INTERNATIONAL CENTER FOR HIGH TECHNOLOGY RESEARCH

THE NEED: *A world-class center for research into technologies of direct and potential benefit to the Pacific region.*

THE APPROACH: *Bringing together engineers, scientists, and scholars from the U.S., Japan, and other Asian and Pacific countries. Open to all, truly international.*

THE GOAL: *Improved or new technologies that will contribute strongly to future industrial and economic growth in the region.*

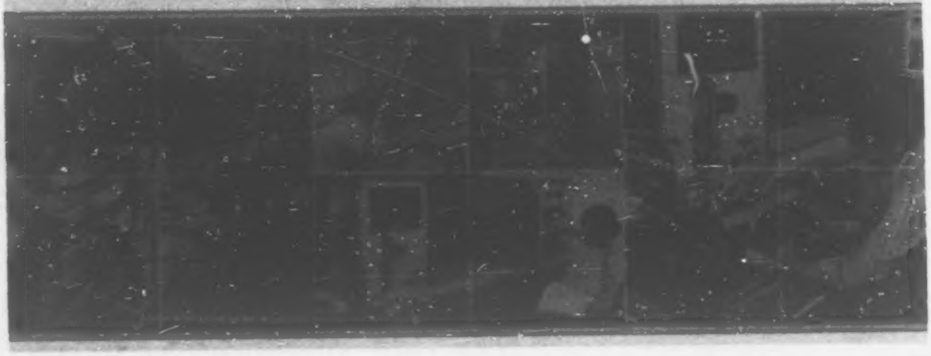
THE FIELDS:
- *Energy and resources technology*
- *Information technology*
- *Biotechnology*
- *Education in research and technology*

RESEARCHING HIGH TECHNOLOGY,
GRASPING OUR FUTURE—
HANDS ACROSS THE PACIFIC.

WHY HAWAII?

HAWAII IS

- the fiftieth state of the United States, part of its stable political, industrial, and technological development
- located in the middle of the Pacific Ocean, a convenient center for East-West cooperation
- a richly endowed natural laboratory of sun and deep sea resources, needed for researching various technologies for energy, minerals, food, and more.
- a mixture of Asian, Pacific, and Western cultures—a comfortable environment for international collaborative research.
- a desirable and technically advanced place where world-class researchers can be attracted to live and work.
- already a working place for scientists and technologists from all over the world working in many diverse fields.



Renewable Resources Research Laboratory—toward the goal of turning common, renewable resources into fuels and high value chemicals.

PACIFIC
INTERNATIONAL
CENTER
FOR
HIGH
TECHNOLOGY
RESEARCH

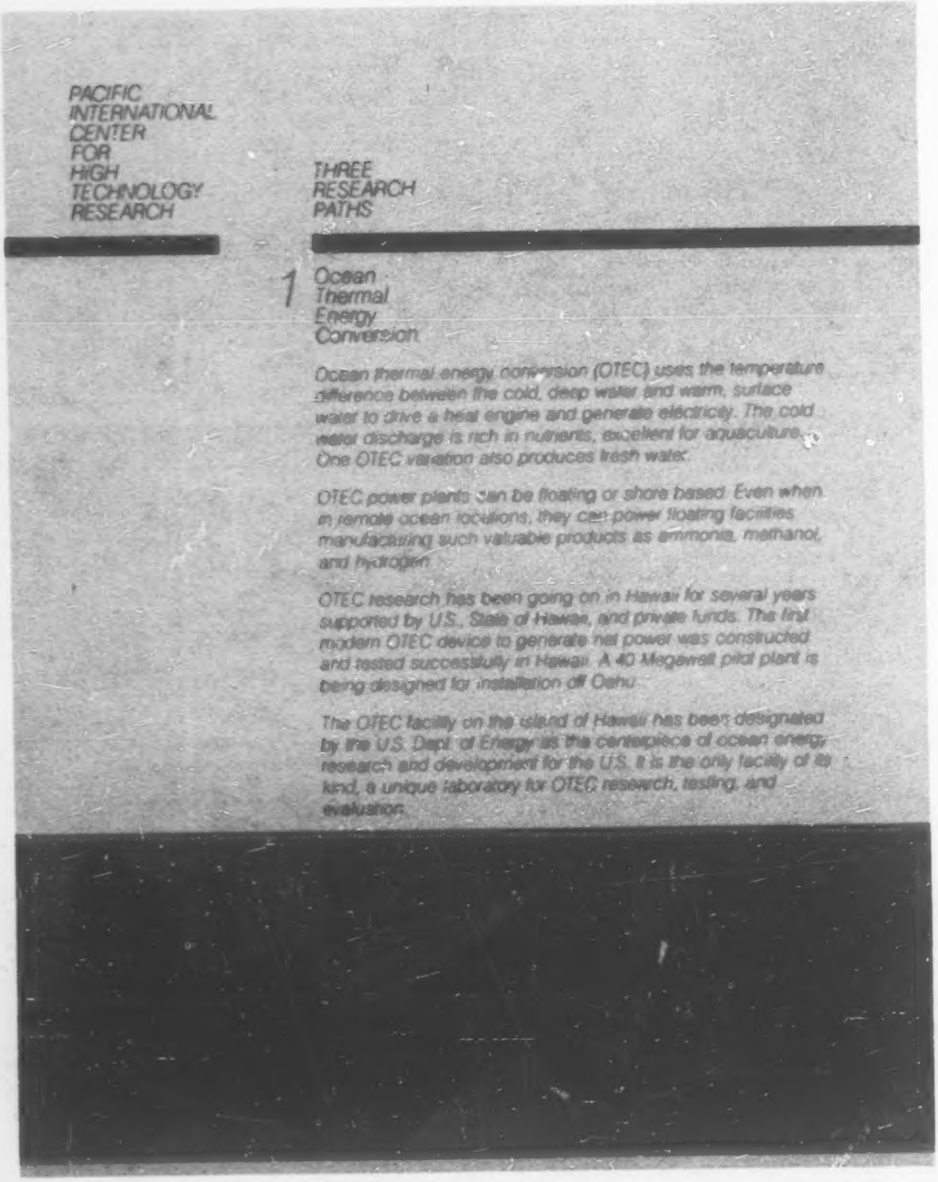
RESEARCH PROGRAM

The Center seeks and encourages international cooperative research, which will advance Pacific technologies at a far greater rate than separate efforts.

Research projects are long-range and selected collaboratively. They aim toward advanced and new technologies for future industrial and economic growth. Participating nations will share the research results.

The research program revolves around ocean technology, renewable energy, and biotechnology. It will make high use of the Pacific's abundant resources of ocean and sun.

Physical Electronics Laboratory—toward developing innovative electronic sensors for uses in virtually all technologies.



PACIFIC
INTERNATIONAL
CENTER
FOR
HIGH
TECHNOLOGY
RESEARCH

THREE
RESEARCH
PATHS

1 Ocean Thermal Energy Conversion

Ocean thermal energy conversion (OTEC) uses the temperature difference between the cold, deep water and warm, surface water to drive a heat engine and generate electricity. The cold water discharge is rich in nutrients, excellent for aquaculture. One OTEC variation also produces fresh water.

OTEC power plants can be floating or shore based. Even when in remote ocean locations, they can power floating facilities manufacturing such valuable products as ammonia, methanol, and hydrogen.

OTEC research has been going on in Hawaii for several years supported by U.S., State of Hawaii, and private funds. The first modern OTEC device to generate net power was constructed and tested successfully in Hawaii. A 40 Megawatt pilot plant is being designed for installation off Oahu.

The OTEC facility on the island of Hawaii has been designated by the U.S. Dept. of Energy as the centerpiece of ocean energy research and development for the U.S. It is the only facility of its kind, a unique laboratory for OTEC research, testing, and evaluation.

2 Artificially Intelligent Robot For Undersea Operations

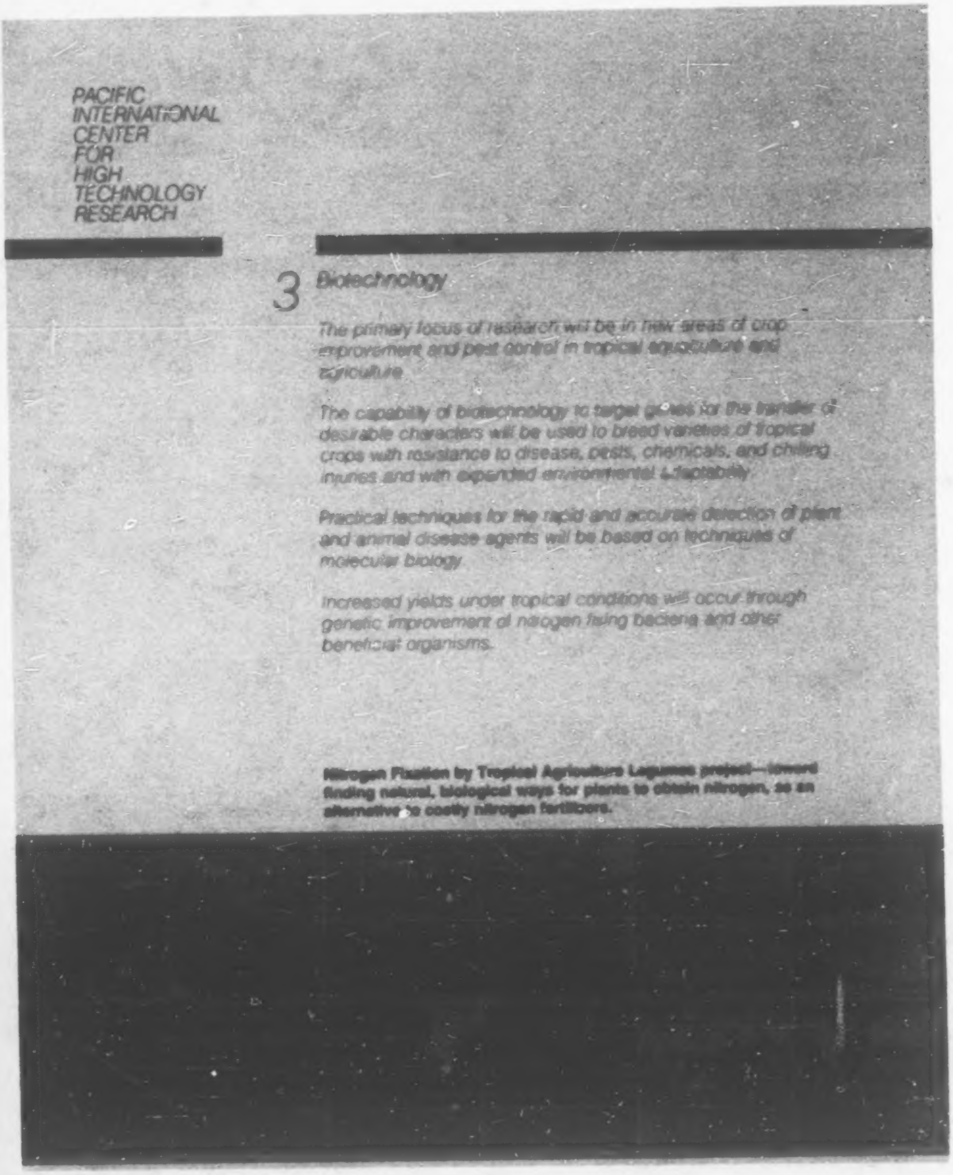
For use initially in undersea OTEC installation and maintenance, the Center is developing an unmanned, untethered apparatus to work in hazardous ocean environments. This can also lead to the benefits of seabed exploration and mineral recovery.

Initial research on robotics and artificial intelligence will focus on such problems as the capability to identify objects in real time, to learn from experience, and to accept, evaluate, and act on natural language input.

The University of Hawaii is in the germinal stages of theoretical studies and field experiments.

← **Natural Energy Laboratory of Hawaii—toward solving the problems of generating electricity through ocean thermal energy conversion.**

↓ **SeaMARC II—the world's only instrument with capabilities for high resolution, side-scanning sonar mapping of the seafloor.**



PACIFIC
INTERNATIONAL
CENTER
FOR
HIGH
TECHNOLOGY
RESEARCH

3 *Biotechnology*

The primary focus of research will be in new areas of crop improvement and pest control in tropical aquaculture and agriculture.

The capability of biotechnology to target genes for the transfer of desirable characters will be used to breed varieties of tropical crops with resistance to disease, pests, chemicals, and chilling injuries and with expanded environmental adaptability.

Practical techniques for the rapid and accurate detection of plant and animal disease agents will be based on techniques of molecular biology.

Increased yields under tropical conditions will occur through genetic improvement of nitrogen fixing bacteria and other beneficial organisms.

Nitrogen Fixation by Tropical Agriculture Legumes project—toward finding natural, biological ways for plants to obtain nitrogen, as an alternative to costly nitrogen fertilizers.

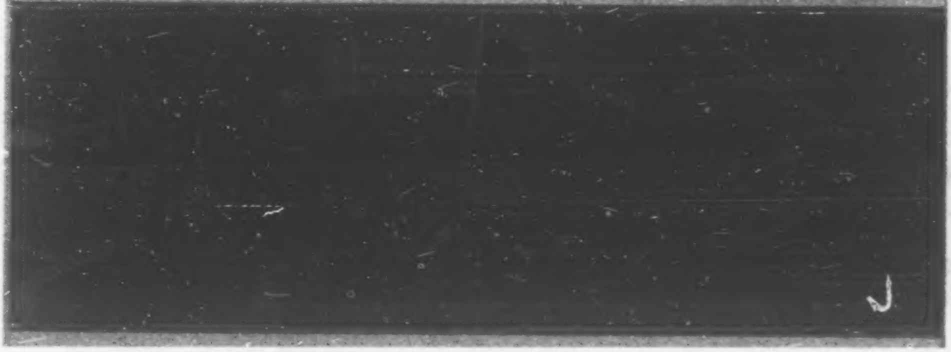
PACIFIC INTERNATIONAL CENTER FOR HIGH TECHNOLOGY RESEARCH

PACIFIC BASIN NETWORK PROJECT

This is a special project within the Center to help propagate, in collaboration with participating nations, Pacific-wide education and training in science and high technology addressed to Pacific problems and goals.

The emphasis is on early application and benefits. The project is intended to supplement programs already underway in universities, community colleges, and technical schools around the Pacific. The Pacific Island nations will identify needs, set priorities, and provide overall direction of programs, with technical assistance from the Center staff.

Mauna Kea Observatory. At the world's finest astronomical observatory site, scientists from around the world probe the secrets of the universe.



COMMENTS FROM OFFICIALS, REGARDING THE PACIFIC INTERNATIONAL CENTER FOR HIGH TECHNOLOGY RESEARCH

HON. GEORGE R. ARIYOSHI
Governor, State of Hawaii

"From the Center will come the next generation of technologies ideal for the people of the Pacific. Hawaii is perfectly located and suited to serve as a center from which cooperative research and educational activities can be conducted and shared. The Center's thrust will be toward programs that benefit Pacific Islanders."

HON. SPARK M. MATSUNAGA
United States Senator from Hawaii

"Too often societies needlessly build boundaries. The Center will provide a bridge that world technologists can cross, to work together for the common good. OTEC, ocean robotics, and tropical biotechnology can best be developed through close partnership among nations, also between the public and private sectors."

DR. FUJIO MATSUDA
Program Manager, Pacific International Center for High Technology Research

"The University of Hawaii, with 2,700 faculty members, is an institution of first rank in a number of fields including especially those identified for the Center, such as Pacific-Asian studies, renewable energy, ocean technology, and tropical agriculture. The Center will draw from these and other domestic talents to blend with the capabilities of the Pacific nations in projects that could determine the nature of the Pacific Basin in the 21st century."

THE
PACIFIC
INTERNATIONAL
CENTER
FOR
HIGH
TECHNOLOGY
RESEARCH...

...was conceived and is supported by Senator Spark Matsunaga and Governor George Ariyoshi.

...was subsequently established by an Act of the 1983 Hawaii State Legislature.

...is presently attached to the University of Hawaii.

...will incorporate as a private nonprofit corporation as soon as feasible.

...will have an international board of directors to set policy and a president to run operations.

BACKGROUND

- *Several major technical planning meetings have been held in Hawaii and Tokyo to discuss the Center's direction and research focus. Participants were government officials, researchers, and scientists from the U.S., Japan, and other Pacific and Asian countries.*

- *Governor Ariyoshi initiated an ongoing series of meetings with leaders of the Pacific Island Nations regarding the organization and direction for Pacific education and training in science and high technology.*

- *At a meeting of the Japan-Hawaii Economic Council, held in Niigata, Japan, the Hawaii Committee presented remarks of strong endorsement from Governor Ariyoshi and Committee Chairman John D. Bellinger, Chairman of the Board of First Hawaiian Bank.*

- *In August 1984 Ambassador Masao Sawaki headed an official fact finding team sent by the Ministry of Foreign Affairs of Japan. The team travelled to Fiji, Hawaii, New York, and Washington, D.C. to review the status of the Center and to make recommendations for possible action by Japan.*

- *Additional expressions of high-level support for the Center have been made by U.S. Vice President George Bush, U.S. Ambassador Michael Mansfield, and Japan Liberal Democratic Party Leader Masumi Esaki.*

THE FUTURE

THE CENTER SEEKS INTERNATIONAL COLLABORATIVE RESEARCH ON PROBLEMS WITH TECHNICAL SOLUTIONS. THE WIDEST PACIFIC PARTICIPATION AND SUPPORT IS INVITED AND SOLICITED.

THE
PACIFIC
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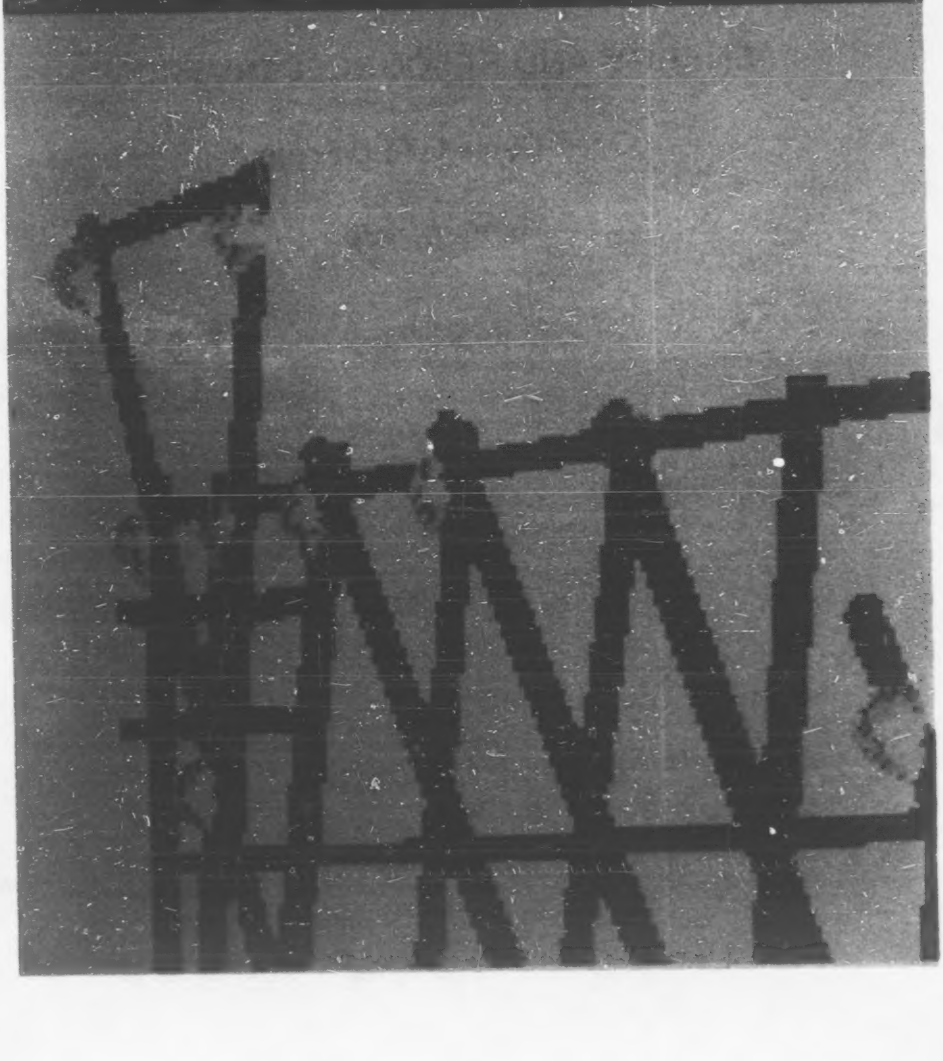
RESEARCH

Dr. Fujio Matsuda
Program Manager

2540 Dole Street, Holmes Hall 240C
Honolulu, Hawaii 96822
U.S.A.



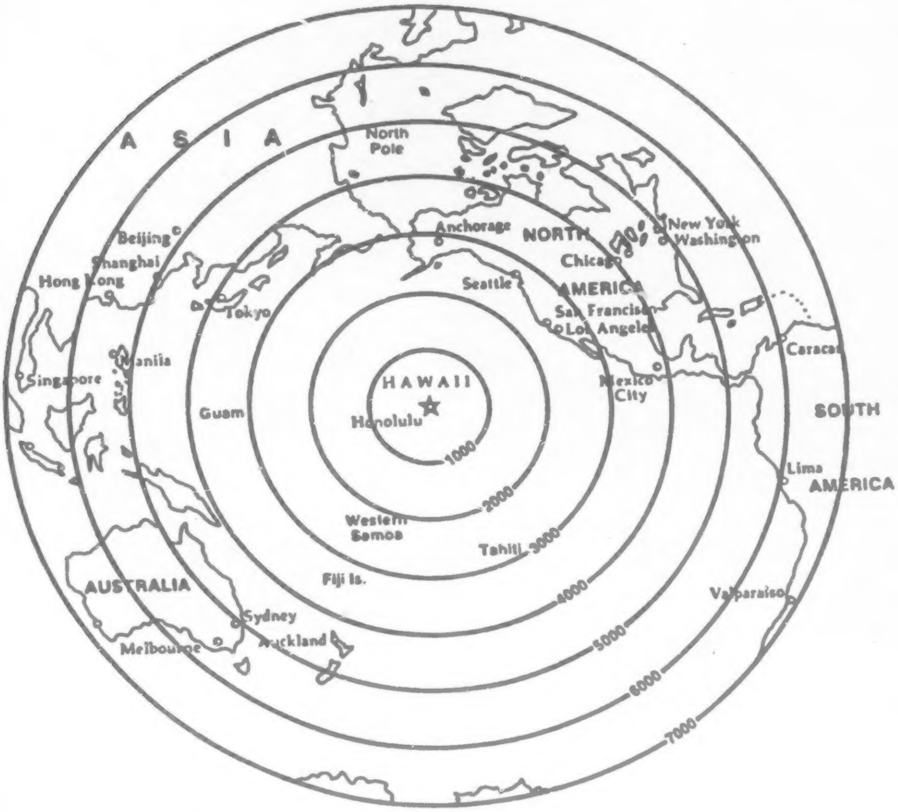
PACIFIC INTERNATIONAL CENTER FOR HIGH TECHNOLOGY RESEARCH

ENERGY AND RESOURCES DIVISION

Open-Cycle OTEC Project

March 4, 1986

HAWAII: THE CENTER OF THE PACIFIC


ASIA
North Pole
Beijing
Shanghai
Hong Kong
Tokyo
Manila
Singapore
Guam
Anchorage
NORTH AMERICA
Chicago
New York
Washington
Seattle
San Francisco
Los Angeles
Mexico City
Caracas
SOUTH AMERICA
Lima
Valparaiso
HAWAII
Honolulu
Western Samoa
Tahiti
Fiji Is.
AUSTRALIA
Sydney
Melbourne
Auckland
1000
2000
3000
4000
5000
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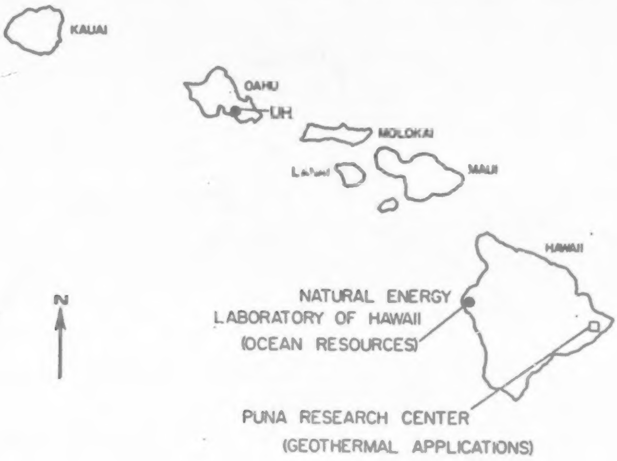
7000

HAWAII: The International Laboratory for Renewable Energy Research and Development


KAUAI
OAHU
UH
MOLOKAI
LANAI
MAUI
HAWAII
N
NATURAL ENERGY
LABORATORY OF HAWAII
(OCEAN RESOURCES)
PUNA RESEARCH CENTER
(GEOTHERMAL APPLICATIONS)

PICHTR ENDORSED BY PRESIDENT RONALD REAGAN

- "Creation of [PICHTR] to conduct some research with our Pacific allies in selected technologies is most timely and appropriate."
- "PICHTR has identified ocean energy, marine robotics, and tropical biotechnology as the appropriate areas for mutual development. I concur with these efforts . . . . ."

[LETTER FROM PRESIDENT REAGAN TO U.S. SENATOR DANIEL INOUYE, APRIL 30, 1985]

CONCEPT OF OCEAN RESOURCES AND INTERNATIONAL COOPERATION STRONGLY SUPPORTED BY KEY MEMBERS* OF THE U.S. CONGRESS

- "As the new round of competition begins, we should like to re-emphasize our interest in engineering research and development related to ocean resources."

- "We again wish to underscore the potential for international cooperation in engineering research in this area."

*LETTER TO NSF DIRECTOR ERICH BLOCH, STRONGLY SUPPORTING CONCEPT OF OCEAN RESOURCES AND INTERNATIONAL COOPERATION AS A FOCUS FOR NSF ENGINEERING RESEARCH CENTER PROGRAM, DATED AUGUST 1, 1985, SIGNED BY:

Don Fuqua, Chairman of the House Science and Technology Committee
Doug Walgren, Chairman of the Science Research and Technology Subcommittee
George Brown, Conceiver of Engineering Research Center Program
Manual Lujan, Ranking Minority Member of House Science and Technology Committee
Claudine Schneider, Member of the House Science and Technology Committee
Sherwood Boehlert, Member of the House Science and Technology Committee

U.S. SENATOR SPARK MATSUNAGA HAS BEEN A PARTICULARLY STRONG SUPPORTER OF BOTH PICHTR AND OTEC RESEARCH

- IN OCTOBER 1982, PROPOSED THE CONCEPT OF PICHTR TO THE JAPAN-AMERICA SOCIETY
- PREVIOUSLY INTRODUCED THE FIRST OTEC AUTHORIZATION BILL, WHICH WAS SIGNED INTO LAW BY THE PRESIDENT OF THE USA
- MORE RECENTLY WITH SENATOR DANIEL INOUYE INTRODUCED S.1109 TO AUTHORIZE THE DEPARTMENT OF ENERGY TO INITIATE A COOPERATIVE RESEARCH PROGRAM IN OCEAN ENERGY AND TECHNOLOGY WITH PICHTR
- EITHER PERSONALLY, OR BY SENDING AN OFFICE REPRESENTATIVE, HAS PARTICIPATED IN ALL PICHTR, OTEC MEETINGS (SEE MATSUNAGA KONA AUGUST 1985 WORKSHOP SPEECH)
- FEELS THAT THE PICHTR ADVANCED OTEC EXPERIMENT IS THE IDEAL PROJECT TO INITIATE COOPERATIVE EFFORTS BETWEEN THE UNITED STATES AND JAPAN (AND ULTIMATELY OTHER COUNTRIES OF THE PACIFIC)

THE OC-OTEC PROJECT DERIVES FROM GOVERNOR GEORGE ARIYOSHI'S OCEAN RESOURCES INITIATIVES:

- NATURAL ENERGY LABORATORY OF HAWAII
- HAWAII OCEAN SCIENCE AND TECHNOLOGY PARK
- STRONG SUPPORT FOR OCEAN RESOURCES PROGRAMS
    - OTEC
    - OCEAN MINERALS
    - AQUACULTURE
    - OCEAN AWARENESS
- INTEREST AND SUPPORT OF PACIFIC ISLAND ACTIVITIES

THE UNIVERSITY OF HAWAII AND COMMUNITY ORGANIZATIONS ARE WELL PREPARED TO PROVIDE SUPPORT

- THE OC-OTEC PROJECT EMBRACES 80% OF THE HIGH PRIORITY RESEARCH TOPICS IDENTIFIED BY THE UH "STRATEGIC PLAN"
    - OCEAN RESOURCES
    - ALTERNATIVE ENERGY
    - TROPICAL AGRICULTURE
    - PACIFIC-ASIAN AFFAIRS
- DILLINGHAM (HAWAIIAN DREDGING) IS WORKING CLOSELY WITH PICHTR OTEC TEAM
- NELH IS A PROVEN FACILITY
- HOST PARK IS A COMING REALITY

DETERMINATION OF PRIORITIES AND GOALS AT FOLLOWING MEETINGS

MAY/JUNE 1983 (HONOLULU)	FOCUS SHOULD BE ON OC-OTEC, PRIMARILY BECAUSE OF FRESHWATER IMPLICATIONS AND NEEDS OF PACIFIC ISLANDS
APRIL 1984 (TOKYO)	CONFIRMED EARLIER DECISION TO FOCUS ON OC-OTEC AS THE MAJOR PROJECT (INCLUDING ESTABLISHMENT OF GEOTHERMAL AND HYDROGEN AS HIGH PRIORITY TOPICS)
AUGUST 1985	165 KW OC-OTEC EXPERIMENT AT APPROXIMATE COST OF $26 MILLION OVER 5 YEARS, AN ATTAINABLE GOAL

ENERGY AND RESOURCES DIVISION

- OPEN-CYCLE OCEAN THERMAL ENERGY CONVERSION (OC-OTEC) PROJECT (80%)
- GEOTHERMAL ENERGY APPLICATIONS (10%)
- HYDROGEN FUEL RESEARCH (10%)
- SEABED MINERALS R&D (0%)

GOALS OF
ENERGY AND RESOURCES DIVISION

- Plan, Design, and Construct a 165kW Advanced OTEC Module by 1990 Capable of Producing Electricity, Freshwater, Agri-aquacultural Products, and Air-conditioning
- Develop a World Class Marine Materials Laboratory

WHY OC-OTEC?

- TECHNOLOGY IS AT A STAGE OF DEVELOPMENT THAT ALLOWS FOR INTERNATIONAL COOPERATION TO DESIGN AND BUILD A "PROOF-OF-CONCEPT" FACILITY
- A REASONABLY EQUITABLE COST SHARING IS POSSIBLE
  - HAWAII: COLD WATER PIPE AND INTERFACE ($8 MILLION)
  - JAPAN: TURBINE ($8 MILLION)
  - USDOE: REMAINDER OF SYSTEM ($10 MILLION)
- THE ELECTRICITY IS BASELOAD AND THE FRESHWATER AND AQUACULTURE CO-PRODUCTS ARE IMPORTANT TO THE ECONOMIES OF THE PACIFIC ISLANDS
- OC-OTEC HAS THE POTENTIAL FOR BEING COST EFFECTIVE AT RELATIVELY SMALL SIZES (LESS THAN 10 MW)
- IS THE IDEAL TECHNOLOGY FOR DEVELOPMENT IN HAWAII TO EVENTUALLY SERVE THE PEOPLES OF THE PACIFIC

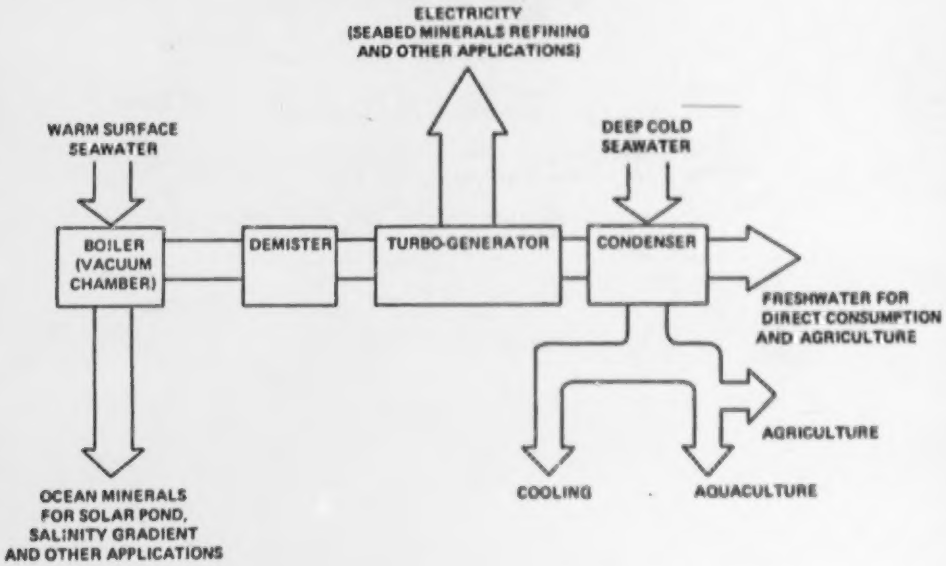
WHY IN HAWAII?

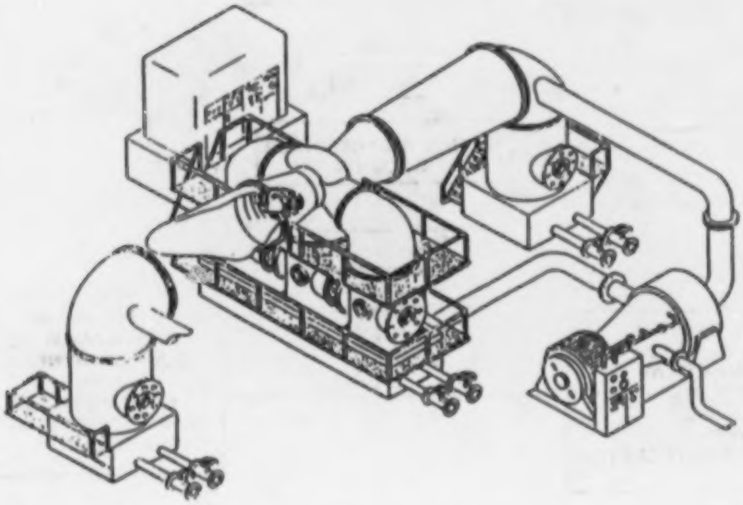
- HAWAII IS CONVENIENTLY LOCATED AT THE CENTER OF THE PACIFIC BASIN AND IS EASILY ACCESSIBLE FOR COMMUNICATIONS AND EDUCATIONAL PURPOSES
- NATURAL ENERGY LABORATORY OF HAWAII IS THE MOST ADVANCED OCEAN ENERGY FACILITY IN THE WORLD
- KEAHOLE POINT IS ZONED AND APPROVED FOR ACCESS TO COLD WATER PIPES AND OCEAN RELATED ENVIRONMENTAL IMPACT ASSESSMENTS
- HAWAII OCEAN SCIENCE AND TECHNOLOGY PARK COLD WATER PIPE CAN BE BUILT TO A LARGER SIZE AT SIGNIFICANT COST ECONOMY WITH SUPPLEMENTAL USDOE FUNDS
- UNIVERSITY RESEARCHERS AND LOCAL COMPANIES ARE EXPERIENCED WITH THE TECHNOLOGY AND CAN SERVE AS THE CORE OF THE R&D TEAM
- SUPPORTIVE AND STABLE STATE AND LOCAL GOVERNMENTS

WHY PICHTR AND OC-OTEC?

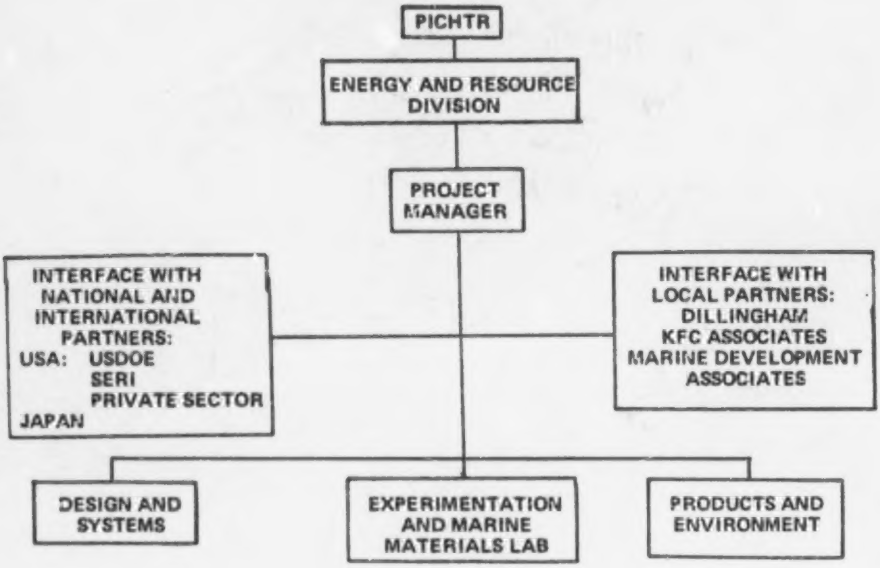
- OC-OTEC SELECTED AT EVERY PICHTR MEETING AS THE HIGHEST PRIORITY PROJECT FOR INTERNATIONAL COOPERATION
- HAS AN INTERNATIONAL BOARD OF DIRECTORS REPRESENTING PROJECT SCIENTISTS AND POTENTIAL MARKETS
- WITH A HAWAII BASE CAN IDEALLY SERVE AS THE INTERFACE BETWEEN JAPAN AND THE UNITED STATES
- IN THE LONGER TERM WITH THE 21st CENTURY, PICHTR CAN PLAY A LEADERSHIP R&D ROLE IN TECHNOLOGIES TO UTILIZE OTEC (SEABED MINING AND HYDROGEN PRODUCTION)

OPEN-CYCLE OTEC MULTIPLE PRODUCT SYSTEM


ELECTRICITY
(SEABED MINERALS REFINING AND OTHER APPLICATIONS)
WARM SURFACE SEAWATER
DEEP COLD SEAWATER
BOILER (VACUUM CHAMBER)
DEMISTER
TURBO-GENERATOR
CONDENSER
FRESHWATER FOR DIRECT CONSUMPTION AND AGRICULTURE
AGRICULTURE
COOLING
AQUACULTURE
OCEAN MINERALS FOR SOLAR POND, SALINITY GRADIENT AND OTHER APPLICATIONS



PICHTR OC-OTEC R&D TEAM


PICHTR
ENERGY AND RESOURCE DIVISION
PROJECT MANAGER
INTERFACE WITH NATIONAL AND INTERNATIONAL PARTNERS:
USA: USDOE
SERI
PRIVATE SECTOR
JAPAN
INTERFACE WITH LOCAL PARTNERS:
DILLINGHAM
KFC ASSOCIATES
MARINE DEVELOPMENT ASSOCIATES
DESIGN AND SYSTEMS
EXPERIMENTATION AND MARINE MATERIALS LAB
PRODUCTS AND ENVIRONMENT

1986 - 1987: BUILD R&D TEAM AND INITIATE SCIENTIFIC AND DESIGN WORK

PICHTR	$400,000
UNITED STATES (& HAWAII)	8,000,000[1]
JAPAN	3,000,000[2]

[1] INCLUDES FUNDS IN FY86 APPROPRIATIONS MEASURE SIGNED BY PRESIDENT REAGAN

[2] SUGGESTED AS JAPAN COST-SHARE FOR FISCAL YEARS 1986 - 1987

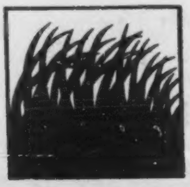
BUDGET

1988 - 1990: COMPLETE DESIGN AND CONSTRUCTION OF OC-OTEC TEST BED

UNITED STATES	$9,600,000
JAPAN	5,000,000

1991 - 1995: RUN COMPONENT AND SYSTEM EXPERIMENTS USING OC-OTEC TEST BED. OPTIMIZE FRESHWATER PRODUCTION

UNITED STATES	$2,500,000
JAPAN	2,500,000



Pacific Basin BioFuel Workshop Report - Vol. 1

November 1-2, 1984

Sheraton Makaha
Oahu, Hawaii

SPONSORED BY:

HAWAII NATURAL ENERGY INSTITUTE
STATE DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT
AMFAC ENERGY
C. BREWER AND COMPANY, LIMITED
THE ESTATE OF JAMES CAMPBELL
MOLOKAI RANCH, LIMITED

HAWAII NATURAL ENERGY INSTITUTE

PACIFIC BASIN BIOFUEL WORKSHOP REPORT
November 1984

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

PART I. INTRODUCTION 6

PART II. GENERAL ISSUES

A. Impacts 7
B. Water and Land Use 8
C. End Use 9
D. Institutional Requirements 9
E. Energy Plantations 10
F. Economics and Financing 10

PART III. ISSUES, PRIORITIES, AND ACTION PLANS

A. Tree Crops 11
B. Herbaceous Crops 15
C. Algae 18
D. Solid Waste 21
E. Conversion Technologies 22
F. Program Policy Issues and Recommended Action. 26

PART IV. CONCLUSIONS AND RECOMMENDATIONS - THE HAWAII BIOFUEL PROGRAM . 30

APPENDIX

A. List of Participants (title, organization & address)

VOLUME II - Opening Session Issue Papers and Related Materials

PACIFIC BASIN BIOFUEL WORKSHOP REPORT

EXECUTIVE SUMMARY

The Hawaii Natural Energy Institute (HNEI), in cooperation with the State Department of Planning and Economic Development, and industry, sponsored the Pacific Basin Biofuel Workshop on November 1 and 2, 1984. Sixty individuals of recognized expertise in biomass technologies and related disciplines, participated, forty of whom were from Hawaii and twenty from outside the state.

The purpose of the workshop was to identify issues or problems that should be addressed, to prioritize plant species that grow rapidly in the local climate, and to formulate a plan of action for the development of Hawaii's biomass resources, for possible Pacific-wide implementation.

First, a general session was held in which the objectives of the workshop were established, individual papers were presented on recent biomass research and a number of policy issues were addressed. This session was followed by working group meetings. For the first meeting groups were organized by areas of expertise. Three were designated by resource: trees, herbaceous crops, and algae, and each identified production, conversion, and utilization issues for each resource prioritizing the most promising species, processes, and products. The three remaining groups discussed solid waste, conversion technologies, and program policy issues.

In the second round of discussions groups were formed across disciplines, with each group addressing the same issues: impacts, end use, institutional requirements, water and land use, economics and financing, and energy plantations.

In the third round the workshop participants were reassembled into the original groups of like disciplines to outline action plans for development of each resource or technology in Hawaii, as designated by the two previous working sessions. Considerations included: needs and priorities for research and development, test and evaluation, pilot plant or demonstration projects, and potential production and utilization issues.

Recommendations were made by the participants to launch a biomass energy development program for Hawaii. The first goal of the program is to replace oil used by the sugar industry with biomass alternatives, while the long-term goal is to provide feedstock for conversion processes to produce transportation fuels, and possibly high-value chemicals as co-products.

The basic element of the biofuels research program is a biomass energy plantation development program. Trees and herbaceous plants selected from among the high priority species as recommended by the working groups should be planted on plots of land of appropriate sizes. One or more such plantations should be established on each of the five major Hawaiian islands. The objective is to determine the most cost-effective agronomic practices and harvesting methods for production of each variety at each location, and, concurrently, to begin to provide biomass for boiler fuel to meet the near-term program goal.

Research on production of algae already under way in Hawaii should be expanded. Future research should emphasize integrated systems. Both macroalgae and microalgae are of interest as potential feedstocks for methane or ethanol production in the near term, particularly where the algae serve the dual purpose of waste cleanup and biomass production. For the long term, microalgae are potential feedstocks for production of fossil fuel substitutes for transportation.

Municipal solid waste is of interest primarily as a feedstock for generation of electricity. The City and County of Honolulu has studied this option for waste disposal for Oahu, and is building a plant for the purpose. Two other counties are studying the economic feasibility of this method of alleviating their waste disposal problems.

CONCLUSION AND RECOMMENDATIONS

A. Conclusions

1. Biomass is the most flexible renewable energy resource and holds great potential as a feedstock for production of electricity and transportation fuels.
   a. Biomass waste (mainly bagasse) is presently the number two source of energy in Hawaii (after imported oil), providing 600 million kWh annually of electricity and an even greater amount of thermal energy for sugar processing requirements.
   b. One ton of 50 percent moisture biomass displaces one barrel of oil for generating electricity.
   c. One ton of biomass, under certain processes and possible use of hydrogen, could provide the feedstock to produce the equivalent of two or more barrels of oil for transportation fuels.
2. Hawaii has a good history of plantation scale agriculture, achieving world leading production of sugarcane and pineapple.
   a. Abandoned sugarcane and pineapple lands in excess of 100,000 acres and an even greater amount of acceptable unused or underused grazing and forest lands properly planted with high-yield biomass crops could displace 10 to 20 million barrels of imported oil each year in the future.
   b. There is sufficient knowledge and capable talent in Hawaii to meet the biofuel challenge.
   c. There is sufficient knowledge of rapid growing species of tree and herbaceous crops that will do well at various locations in Hawaii in energy plantations to provide a significant level of biofuel feedstocks in the future.

B. Recommendations

The following recommendations represent a consensus of the workshop participants.

1. Biomass Resource Assessment: Complete a comprehensive data base for all land in Hawaii using available data for suitability of growing various types of biomass (tree, herbaceous, and algae crops) for energy feedstocks. A computer model should be developed, to include the land resource model, a growth-yield data base, and an economic model, as described below.

   a. Land Resource Data Base: Include all relevant data: range of average annual rainfall, insolation, wind speed; soils; terrain, slope, elevation; ownership, present use, availability; land value (sale, lease, percent of gross and net revenue); zoning, land use classification; and other pertinent information. Access could be by state tax map key which exists for every parcel in the state. Environmental and other impact issues should be adequately addressed.

   b. Growth-Yield Model: Details of ranges of values of growth and harvested yield using input variables of densities and different conditions of the high-priority rapid growth species will be programmed, to be matched with the land resource data base.

   c. BioFuel Economic Model: An economic model, building on the growth-yield model and the land resource data base, that includes variables of front end and capital costs; operating costs (allowing for ranges of costs for irrigation, fertizilizer, herbicides, etc.); harvesting costs (single or multi-year harvesting including various harvesting equipment required and labor); and feedstock conditioning costs for end use alternatives and estimated revenues (by ton or other product value). Output will be net return on investment or other bottom line amount that might be required for decision-making.

2. Conversion Technologies: The progress of the most appropriate near-term energy conversion technologies will be closely monitored, and where possible, preliminary work will be carried on in Hawaii on biomass feedstock characterization.

   a. Pilot plants that could be sited in Hawaii should be considered and State CIP funding aggressively sought if the plant is decided to be a high priority for Hawaii's future transportation fuel objectives.

   b. The production of jet fuel from biomass is another high priority research area that should be developed more fully with legislative support.

3. Basic Research Program: Other promising rapid-growth species should be identified and programs initiated to secure data for future decision-making to the full extent that funding allows. A trial plantation might be installed as part of 1985 Statewide planting of 1 million trees to commemorate the centennial of Japanese immigration to Hawaii and the 150th anniversary of the founding of the Hawaiian Sugar Planters' Association.

a. The recommendations of the workshop participants will constitute the priority listing for selection of plant species.

b. Areas where processes can be combined will receive a special priority, such as in the possible use of algae for producing fuel and for cleaning up an environmental problem, e.g. to aid in the removal of hydrogen sulfide and silicon dioxide in geothermal fluids.

c. High priority should be given to R&D of harvesting equipment and techniques, breeding and genetics, coppicing, and impacts; and also for fundamental research related to systems integration and biomass conversion to fuels.

d. Possible hybrids should be investigated and developed further.

e. In respect to solid waste, research to dewater sewage sludge is important as well as research to identify and develop ways to use the by-products and residues.

4. End Use: An assessment should be made of various end use options, for example, methanol, ethanol, or hydrocarbon fuels for transportation, and direct combustion versus gasification for boiler fuel. The overall technical and economic feasibility of development of each option, as it might be constrained by public social and environmental concerns, should be investigated.

5. Biomass Energy Plantation Demonstration Planting Program: There are some well-proven, rapid-growth biomass species for semitropical and tropical areas like Hawaii. The remaining task is to demonstrate the techniques and feasibility of growing these species in energy plantations The goal is to document the best conditions for proven successful and economically viable energy plantations to assist private-sector investors to fully utilize their resources. This program needs both public and private cooperation and financial support. The program outlined in the Plan For Action recommends:

   a. Ten commercial scale tree farms of approximately 200 acres each, with at least one on each island, planted with a variety of species (e.g., inclusion of legumes to provide nitrogen).

   b. A 200-acre site for a full field trial of the "energy cane" concept, and possibly up to 200 acres of sorghum to produce both sugar and cellulose.

   c. Ten to twenty 20 acre sites for field trials of grass crops.

The primary lands to be used are abandoned cane and pineapple fields as well as appropriate unused or underused grazing and forest lands, in both public and private ownership (with the full cooperation of the landowners).

This near-term program could realize 2,000 acres of tree crops, 400 acres of energy cane and sorghum, and 200 to 400 acres of other grass and herbaceous crops. The ultimate goal would be the realization of biomass energy plantations in excess of 100,000 acres. This would save millions of barrels of imported oil each year as well as provide economic development opportunities and jobs, improve the State's and the Nation's balance of trade, and reduce Hawaii's vulnerability to future oil supply disruptions.

6. Hawaii Biomass Energy Association: A proposal was made to establish an association or commission that would promote the use and development of biomass energy in the state of Hawaii. It is recommended that the association be incorporated as a not-for-profit scientific and educational forundation under IRS code. It was felt that sufficient interest existed at the conference to provide the base necessary to establish the association.

PART I -- INTRODUCTION

The Hawaii Natural Energy Institute (HNEI) held a biofuel workshop on November 1 and 2, 1984, that was co-sponsored by the Department of Planning and Economic Development, the Campbell Estate, AMFAC Energy, C. Brewer and Co., and the Molokai Ranch. Twenty participants from outside Hawaii and forty from Hawaii spent two days of intensive work. (See Appendix A for names and addresses.)

The purpose of the workshop was to identify issues or problems that should be addressed, to prioritize rapid growth species of plants for tropical areas like Hawaii, and to set forth a plan of action for biofuel development in Hawaii. While the potential impact is expected to be Pacific-wide, Hawaii is an excellent microcosm of developing activities and has been advanced as an international laboratory site for these activities.

The six areas covered by two discussion group sessions were: tree crops; herbaceous plants (sugarcane, sorghum, napier grass etc.); algae (marine and fresh water macro- and microalgae); solid waste; conversion technologies; and policy issues (institutional, support, biomass resource assessment, energy plantations, financing, and economics). Another set of group discussions focused on related issues of impacts (environmental, social, health, native Hawaiian concerns, political, etc.); water and land use; end use; economics and finance; energy plantations; and institutional requirements.

Recommendations were made to launch a biomass energy development program for Hawaii. This report summarizes the various considerations and recommendations of the three sets of group meetings. The Conclusions and Recommendations section describes a program for biofuel development in Hawaii to provide for future energy needs, especially for liquid and gaseous transportation fuels.

New emphases recommended by participants include: the concept of "energy cane," presented by Alex Alexander of the University of Puerto Rico; use of sweet sorghum, which can produce more biomass than sugarcane in some locations; production of jet fuels from biomass and methane from algae; sound ways to harvest and reforest unused forest lands, as well as ways to utilize some of the approximately 100,000 acres of abandoned sugarcane and pineapple lands for energy plantations.

The immediate goal of the program is to reduce the consumption of dollars of imported oil used by the sugar industry through supplementation by wood or herbaceous crops. The long-term goal is to provide feedstock for the production of chemicals and liquid and gaseous transportation fuels. Issue and overview papers presented during the opening session can be found in Volume II.

PART II — GENERAL ISSUES

Six groups, organized across disciplines, each discussed a list of six issues related to the various types of biofuels. The following is a summary of the key concerns or comments by topic.

A. IMPACTS
(Environmental, social, health, and political issues)

1. Emphasis should be placed on using former sugarcane and pineapple lands because it is generally agreed that this acreage is already free of adverse social, political, native Hawaiian, and environmental problems. Using this land would have the benefit of adding or reinstating jobs.

2. To reduce adverse environmental impacts, biofuel production should be combined with waste treatments where possible. Sewage or other wastes now thrown into the ocean can be converted into methane, consumed by oil-producing algae, or provide needed nutrients for growing crops.

3. Particulate emission (ash) from mills and field burning and other emission or effluents from processing are an environmental problem.

4. Jobs lost by the closing of the sugar companies can be restored by growing new crops.

5. Current wood harvesting operations on Hawaii are meeting some public opposition. Both Molokai and Puna have current fuel needs which biomass energy plantations might supply. They are logical choices for biomass R&D activity for wood and grass crops. Oahu is the best site for mass culture of algae because of the availability of industrial carbon dioxide. Use of sewage has public relations advantages, even if the current technical advantages are not certain. Facilities for growing algae will be most acceptable in industrial areas.

6. Many opportunities may now be unrecognized and potential solutions to problems may be overlooked. Obstacles to overcome are: (a) the economics of biofuel production, except for sugarcane bagasse in the Pacific Basin, has not been demonstrated, even though the basic technology has been shown; (b) current economic feasibility studies are needed for the production of particular biofuels; (c) environmental and social concerns with the production and use of some biofuels are not resolved; (d) material balances and inventory considerations must be addressed (i.e., waste treatment and disposal are losing nutrients, and minerals in ocean outfalls and by soil erosion).

One recommendation made by several groups is to create a biomass energy council or association with members of various disciplines to consider the different aspects involved, such as technical social, and environmental concerns, land and water management, and demonstration project issues. The purposes of the group would be to promote and seek funds for R&D programs involving the private sector, university, and government. Specific tasks would be (a) establish research priorities based on economic end uses; (b) promote implementation projects in conjunction with the private sector; (c) establish early involvement with the public; (d) identify and lobby for motivating legislation to outlaw less desirable fuels, assure a reasonable rate for biomass-produced power from the utilities, and establish tax incentives to attract corporate funds; and (e) participate in a USDOE regional program and possibly establish a fund-raising vehicle to pursue priority programs.

A biofuels advisory committee was suggested as a means of educating the public and advising them as to development plans as they pertain to environmental, health, social, and political concerns. This committee should be a part of the biomass energy association.

7. It was agreed that State government should take the lead in the promotion of biofuels development. The State's function should be to outline objectives, assemble information on technologies, perform economic analyses to determine the relative viability of the various options, complete a biomass energy resource assessment, and support or carry out needed R&D. The California concept of "payment capacity," which determines the net return after all capital and operating costs are considered for a potential project, was suggested for this analysis. Tasks designated to be undertaken should then be prioritized and assigned to consultants and specialists for development. This will entail a good working relationship with the private sector and the establishment of business incentives conducive to capital investment. Government must continue to fund research and development in biofuels where technologies are not now economic, but have good potential for the not too distant future, and must support promising basic research in biomass energy.

With biomass farming projects, the need to restore the lands to their productive and acceptable conditions so far as possible is important. It was suggested this could be achieved through performance bonds.

With any biofuel program it is essential that an established market for the end product exists, and on the supply side, a long-term land commitment must be made for an energy plantation operation.

Another major function of the State is to develop a plan for emergency situations that might involve skyrocketing prices of petroleum or disruptions of supplies. Government must continue to sponsor research and development in areas that will mitigate the effects of these possibilities.

B. WATER AND LAND USE

1. In general, there was not much concern about competing uses, except for urban sprawl on Oahu that might raise some land values above profitable levels for agricultural crops.

2. Issues raised were: biomass yield per unit input (e.g., for water, nutrients, and insolation); intercropping of grasses with trees (mac nuts, energy trees); sewage effluent for irrigation of sugarcane and other biomass crops; and public resistance to developing certain areas (watershed, tourist areas). Some suggestions were to plant abandoned sugarcane and pineapple lands or to open acceptable new areas.

3. Oahu is the most appropriate research site for mass culture of algae because of the carbon dioxide available from existing refineries and power plants. The Kahuku Shrimp Farm may serve as a model for the environmental questions related to effluent disposal. Digester sludge disposal requires complete studies. Macroalgal technology is still in the research phase and effluent studies are not needed at this point.

C. END USE

(Competing uses of food and energy; various forms of electricity, gaseous and liquid fuels, and chemical feedstocks, other uses.)

1. It was explained that both Hawaiian refineries are optimized for jet fuel production and that both No. 6 (heavy) fuel oil and gasoline currently are exported, which explains lack of enthusiasm by the petroleum industry for biofuels. It was also observed that Chevron Refinery needs to use high-quality Indonesian crude oil, which could be a strategic problem in times of emergency.

2. Little biofuel research currently is being done on the jet fuel that Hawaii especially needs, except by Arizona State University and a few others. It was recommended strongly that this area be explored.

3. The concept of making methane or a methane/electricity product mix from energy cane grown to replace sugar, if the sugar price supports fail to be passed, was considered important. The relatively small amount of gas now used in Hawaii comes from cracking expensive petroleum hydrocarbons.

4. If the methane distribution system cannot be expanded where the methane is made, may be desirable to burn the methane to make electricity.

5. Algae might be grown where methane is made or bagasse is burned to use the co-product, carbon dioxide.

6. Biomass crops provide many co-products with much flexibility, (e.g., sugars or ammonia compounds). The economics basis must be determined for each product. The highest value product might not necessarily be energy related. The biomass could be used for chemicals or fertilizers, or feed crops to replace pineapple-green crop.

D. INSTITUTIONAL REQUIREMENTS

(Zoning/permitting, laws and regulatory requirements; e.g., workmen's compensation requirements, public acceptance and support)

1. If the abandoned sugarcane land and land adjacent to sewage treatment plants are the primary land use and water use areas, no special institutional obstacles are expected.

2. Response of the State and other institutions to potential industry shutdown is slow. Utilities are reluctant to purchase biomass generated electricity at "reasonable" displaced cost rates. Accessibility of transportation is needed for products. The "not in my back yard" attitude among the public influences project location.

E. ENERGY PLANTATIONS

(Special problems facing large scale development of terrestial or marine crops)

1. No special problems with energy plantations were perceived as long as they were located on abandoned sugarcane or pineapple land. Possibly nearshore algae facilities would be acceptable.

2. Intergeneric crosses, e.g., cane/sorghum, are limited by growing areas (elevation, temperature, rainfall). Yield potentials (inputs vs. outputs) sunlight, wind, and available land must be assessed and lead time must be allowed to produce various crops.

3. Puna would be a good site for a 1000-acre experimental plantation. The plantation would study both production (grasses, trees, other high-priority crops) and impacts. Species selection should be aimed at pest resistance to avoid pesticide uses. The economics of fertilization, interplanting, and other management options should be examined. Two 500-acre blocks in different environments would be preferred.

4. Production studies should be coupled with handling, combustion, and emission studies to be made in a suitably instrumented research-scale power plant. Existing power plants are probably not suitable for these studies.

5. Industry participation is important. A suggested structure for ensuring this participation is an independent R&D corporation with industrial participation on the board of directors. Local community representation should be included after plans are made, and the plans should be available for criticism.

6. There is a great need for experimental plantations on Molokai similar to that proposed for Puna. Adequate lands appear to be available. The issue and research questions are also similar to those for Puna.

7. Kauai has recently shown interest in a biofuels program.

F. ECONOMICS AND FINANCING

(Life cycle costing, front end requirements, capital costs, operating costs, feedstock cost and values, product and fuel values, land costs, government incentives [U.S. tax credits, state general excise and county property tax abatement and deferral; federal and state loan funds, biomass energy strategic reserve program, product tax credit, e.g., methanol tax credit)

1. The economics of the overall alternative systems (e.g., energy cane, sweet sorghum, microalgae sewage treatment, etc.) should to be compared on cost-benefit and social bases. Concern was expressed for the 10,000 sugarcane jobs that might be lost if table sugar price supports were removed. What is the next best biomass option for those people and those lands? It may be necessary to do something, even if it means using special credits or aid.

2. Startup costs (capital and initial planting costs, operating costs,

harvesting and hauling costs, end use costs (preparation and conversion system), land cost, and financing costs must be considered.

PART III. — ISSUES, PRIORITIES, AND ACTION PLANS

Technical groups were organized by area of expertise. The first three were designated by resource: Tree crops, Herbaceous crops (grasses), and Algae. Production, conversion, and utilization issues were identified for each resource, and the most promising species, processes, and products were prioritized. For solid waste, depending on the source (e.g., municipal, feedlot, or agricultural waste), conversion technologies were the primary consideration. The fifth group, Conversion Technolgies, addressed issues of feedstocks from any biomass resource, so in this sense it was a cross-disciplinary group. Finally, the Program Policy Issue group considered policy issues relating to any or all biomass resources. The second round of meetings of these groups reviewed their initial findings and formulated action plans.

The "plan for action" groups used the reports from the two previous working group sessions to outline plans for the development of each resource or technology that had been decided would be appropriate to Hawaii. Factors considered included needs and priorities for research and development, test and evaluation, pilot plants or demonstration projects, and potential production and utilization issues.

A. TREE CROPS

1 Summary of Issues

a. Trees are a useful biomass producer for numerous processes.

b. Exclude small "backyard" boiler systems and those greater than 30 MW.

c. Species must be suitable to the type of land and must be economically feasible and competitive with other uses of that land.

d. Density must be optimized (too low vs. too high).

e. Immediately useful trees are quite few in number.

f. Conditions on the availability of the land must be considered.

g. Not much is known on harvesting, especially regarding size of trees and planting density.

Discussion of Issues:

Solid fuel (wood) from trees is perhaps the best short-term alternative for Hawaii. Trees are a useful biomass product for numerous processes described by other committees. Also, four boilers (AMFAC--Puna, Hawaii, and Lihue, Kauai; HCPC, Hawaii; and HC&S, Maui) operate at least part-time on wood chips, and a third, on Molokai, is soon to be brought back into operation.

The development of tree plantations is important in order to ensure a source of wood in the future and to lessen concerns from various groups arising from cutting of existing native or large-diameter planted forests. At least four economic studies between 1977 and 1982, three by HNEI, have shown that tree plantations could be economical at different locations and levels of scale.

Expertise exists in the state on the establishment and maintenance of plantations, particularly in the area of species and site considerations. The committee selected 10 well-studied, fast-growing species of trees (listed in the next section) available immediately for use in Hawaiian and other Pacific Basin area energy plantations. More studies need to be made of suitable harvesting systems for Hawaiian economic and environmental conditions, particularly regarding differences in tree size brought about by silvicultural options such as controlled spacing.

Practically speaking, thermal conversion systems above 30 MW should not be considered an option for Hawaii. It is doubtful that sufficient land could be set aside for plantations to feed such systems. Also, most existing boilers in the State are less than 30 MW in size. Small-scale (i.e., "backyard") plantings were not considered an option by the committee, as harvesting and transport problems would arise.

2. Priorities

We know enough about trees as an energy resource to call for action now in establishing crops. Three priorities were established to categorize tree species for consideration in biofuel plantations in Hawaii. The first priority is those species considered as sufficiently studied in Hawaii, with sufficient seed available either in the state or internationally. These species are known to perform well in the state, although several are quite site-specific.

The second priority is those species that have shown promise in experimental trials, but insufficient evidence of their suitability exists to widely promote them at this time. It is proposed that further study be made on these species.

The third priority is some of those species that have not been studied previously in Hawaii for wood energy, that show promise in the wider Pacific Basin region, are more suitable for liquid conversion, or have primary use as plantation crops but have co-products that may be marketable or fired. Although it was recommended that research be done on these species, research funding should be granted only after careful consideration of each species.

Priority A - Action

Eucalyptus grandis
Eucalyptus globulus
Leucaena leucocephala
Acacia mangium
Albizia falcataria
Eucalyptus saligna
Buclayptus robusta
Acacia mearnsii
Casuarina equisetifolia

Priority B - R&D

Leucaena diversifolia
Leucaena hybrid
Eucalyptus urophylla
Samanea saman
Casuarina glauca

Eucalyptus tereticornis
Eucalyptus camaldulensis
Prosopis pallida
Enterolobium cyclocarpum
Myrica faya

Priority C - Long-Range R&D

Euphorbia, spp.
Musa spp.
Cocos nucifera
Sapium sebiferum

Artocarpus communis
Macademia integrifolia
Bambusa spp.
Pinus edulis

3. *Action Program*

a. Demonstration Plantings

It is now felt that further plantings of the biofuel species listed above should be made *not* to find out if they are potential resources but rather *because* they are potential resources. The objective of this program would be to demonstrate the techniques and feasibility of energy plantations with the goals of sparking sufficient interest in private industry to develop the program further. These plantings should be demonstration in nature, established on the major Islands in areas already using wood energy in collaboration with industry and landowners in these areas. State and county governments and the University of Hawaii are all possible support institutions.

Such demonstrations must be geared toward real-life economics, and large enough to harvest—i.e., to gain experience in the handling and transport of the small diameter trees (3-10 inches) produced by close spacings proposed for bioplantations. Generally, it is felt that the minium size for such plantings should be 20 acres, with 500 acres as an upper limit. The number of such demonstrations will depend on interest and funding.

Three priorities were developed for the program, based on both interest and availability of boilers and other infrastructure:

(1) High degree of local interest and felt need; and availability.

Molokai: The Office of Hawaiian Affairs (OHA) and the Molokai Ranch have each proposed 20-acre sites with a possible additional 200 acre expansion by Molokai Ranch.

Hawaii: The Puna-based Bio-Power Corporation is now harvesting natural ohia forests for chips to feed the Puna boiler. A 100-200 acre planting is proposed for the areas being cleared. However, there was at least a minority opinion that they "should stay out of native forests."

Oahu: The Waialua plantation has stated interest in establishing a trial plantation. A 200 acre plantation might be installed as part of the 1985 planting of one million trees in Hawaii to commemorate the 100th anniversary of Japanese immigration to Hawaii and the 150th anniversary of the founding of the Hawaiian Sugar Planters' Association.

Kauai: Lihue Plantation has two small trial plantings. It is proposed that several 100 acre plantings be considered, perhaps in collaboration with the county government, which has reportedly expressed a great deal of interest in becoming the center of excellence for biomass in Hawaii.

Maui: The Puunene mill, Hawaiian Commercial and Sugar Company (HC&S), is now burning wood chips harvested from older eucalyptus stands. Although there are small demonstration plantings near the mill, it is suggested that at least two 100 acre plantings be made at this site. Also on Maui is the Pioneer Mill boiler, although land availability may be a problem.

b. Research

Several areas of research were identified. The purpose of these research areas is to support the proposed demonstration plantings. It should be pointed out that research in several of these areas is already under way, notably by the University of Hawaii, Institute of Pacific Islands Forestry, and the C. Brewer BioEnergy program. The following areas of research are presented in order of their relative priority:

(1) Harvesting: Methods, machinery. Cost of harvesting vis-a-vis, age and size of tree, spacing, etc. "Hands on" harvesting trials.

(2) Breeding and Genetics: Cloning, breeding, and selection of fast-growing varieties of first and second priorities in species list.

(3) Coppicing: Productivity, thinning, yield.

(4) Impacts: Social, environmental, economic.

c. Support Programs

(1) UH Tropical Forestry Program: The concept was endorsed of establishing a formal tropical forestry program at the University of Hawaii. It was noted that there is now much forestry research under way at UH in the areas of silviculture, watershed management, pests and diseases, species trials, mensuration, ecology and economics. Much of this is funded by the federal McIntire/Stennis program, which requires matching state funds. It is felt by many in the State that it would be worthwhile to organize and focus existing projects in support of forestry needs in Hawaii, which includes the biofuel demonstrations proposed here.

Eventually, the forestry program (under the UH College of Tropical Agriculture) would be in a position to assist similar programs in the Pacific Basin as well.

(2) Hawaii Biomass Energy Association: A proposal was made to establish an association or commission that would promote the use and development of biomass energy in the state of Hawaii. It is recommended that the association be incorporated as a not-for-profit scientific and educational foundation under the IRS code. It was felt that sufficient interest existed at the conference to provide the base necessary to establish the association.

B. HERBACEOUS PLANTS (GRASSES)

1. Issues

Sugarcane bagasse is already an important source of energy in Hawaii and it is believed that the sugar companies will continue to contribute to energy production in the forseeable future. There are a number of advantages that accrue to grasses that make them attractive as a source of biofuel energy.

a. Some advantages cited for energy grasses include:

(1) Short rotation time and relatively low establishment cost.

(2) Versatility in fuel options, with fiber to burn, sugars for alcohol, foliage for anaerobic digestion.

(3) Flexibility of marketing as fuel or feeds.

(4) High productivity with numerous adapted varieties available.

(5) Relatively low harvest costs.

b. Grasses are also acknowledged to have some disadvantages:

(1) Maximum yields rely on high inputs of water and fertilizer.

(2) Low bulk density in shipment.

(3) High water content (but could be reduced by possible field drying).

(4) Require rock-free, mowable land.

c. The needs for research and pilot-scale demonstrations include:

(1) Economic feasibility analyses of energy grasses for specific sites; e.g., abandoned sugarcane lands on which irrigation may still be economical.

(2) Pilot-scale demonstrations of energy cane management (modules or plots up to 200A), sweet sorghum, or pennisetum (modules up to 50A).

(3) Varietal research, both short-term evaluation of existing cultivations grown under energy-grass management, and suitable long-term hybridization within and between species (as diverse as cane and sorghum).

(4) Energy-grass species trials for comparative performance with species, irrigation, and fertilizer as possible variables, with ultimate assessment of total energy and materials balance values.

(5) Harvest system research; e.g., assessing whole cane vs. burned cane harvest.

(6) Avoided costs issues: a significant factor influencing economic viability of biofuel plantations for power generation was the low avoided cost approved by PUC for electrical power generation (Hawaii) which impacts all biomass and other renewable energy economic viability.

2. Priorities

Many tropical grasses are suitable for combustion to generate electricity and steam and produce high biomass yields, with apparently similar responses to three major inputs: (1) water, (2) fertilizer, notably nitrogen, and (3) incident solar radiation. The first three priorities established for herbaceous crops reflect experience with the crop rather than known differences in its ultimate yield potential, which appears to be in the range of 25-50 T dry matter per acre per year. The crops listed below are ranked in terms of their potential as energy producers for Hawaii on that basis.

a. Sugarcane: Energy cane management systems, perhaps with selected varieties and modified harvest cycles and machinery. The crop has high productivity, and the expertise and infrastructure to produce it already exists. No significant capital outlay would be required to place the crop in production, and modifications of existing practices would permit the crop to be grown for energy.

b. Sorghum and Sudan-sorghum crosses: Large forage sorghums that regrow vigorously from ratoon; use of grain for molasses may be considered for co-product. The forage sorghums have high productivity. There is need to contrast the productivity of sorghum with that of cane in the same environments to test the assumption of sugarcane's superiority. The advantages of sorghum include low cost of propagative material (seed) and planting. Mechanical harvesting is relatively simple and lower cost. For some of the non-forage type sorghums, other products could include grain and molasses, which would be suitable for liquid fuel production.

c. Napier grass (*Penisetum* sp.): New varieties selected for high biomass production. The advantages of napier grass include high potential productivity, especially of the improved varieties, and relative ease of propagation and harvesting.

d. Other tropical grasses: Other grasses possibly more suitable than sugarcane to marginal soil or low levels of inputs such as Guinea grass (*Panecum maximum*) and California grass (*Brachiaria* sp.), with Buffalo grass for very dry areas, or corn for liquid fuel. Some of these grasses have specialty or multiple-use outputs (e.g., maize, which could be used for feed, fodder, fiber for combustion fuel, or for the production of liquid fuel).

e. Other herbaceous plants: Pineapple for liquid fuels; low priority for other crops such as taro or cassava. None were considered sufficiently attractive at present to warrant serious consideration.

The table below shows the management considerations and end uses for the crops lists above.

Table 1. FACTORS INFLUENCING SPECIES SELECTION FOR ENERGY GRASS MANAGEMENT

	Species					
Factor	Sugarcane	Sorghum Sudan x sorghum	Napier grass	Other grasses	Maize	Pinapple Cassava Taro
End Use						
1. Lignocellulose (LC)			X	X		
2. LC plus sugar	X					
3. LC plus alcohol	X	X			X	X
Management						
1. Big harvest/veg. cuttings	X			X		
2. Small harvest/veg. cuttings						X
3. Small harvest/seed		X	X	X		

3. Action Program

a. Pilot scale demonstrations.

(1) Energy cane: An area of 20 to 200 acres per module with the crop grown on a one-year system. The land area needs to be large enough to make it possible to observe problems not likely to occur in smaller land areas and yet be small enough to be feasible for smaller operators to handle. The output would go into a basic cane recovery system with

sugar recovery followed by combustion of the fiber. An alternative to the module would be in-field sampling using the Hawaii sugarcane industry field trial (FT-7) procedure. A comparison would be made of whole-cane versus burned-cane harvesting.

(2) Sweet sorghum: An area of 10 to 50 acres per module would be needed following the procedure outlined above. The output would be sugar recovery as molasses for fermentation with combustion of the fiber.

b. Economic feasibility analyses: The feasibility of energy grasses for specific sites (e.g., abandoned sugarcane lands on which irrigation is still economically feasible) and specific end uses need to be studied. This should also include energy cane production or good soil field tests.

c. Varietal research: There is need for short-term evaluation of existing cultivars grown in energy-grass management systems. A suitable long-term hybridization study should to be initiated within and between species and genera with the objective of maximizing biomass productivity. It is believed that the genetic potential of intergeneric hybrids in terms of energy production probably has not been exploited.

d. Energy-grass species trials: Trials are needed to establish the comparative performance of the tropical grasses. Variables that likely would need to be included are species, irrigation, and nutrients. A state-of-the-art assessment of herbaceous crop options for liquid fuel or lignocellulose products is also desirable.

C. ALGAE

1. Issues

While algae appear to offer great potential as sources of fuels, there is as yet no significant commercial fuel production experience. Algae have been used for wastewater purification, where algae can be harvested and anaerobically digested to produce methane, which in turn may be used as a source of energy and thereby improve the economy of the overall process. Present commercial production is primarily for food and other high value products on a relatively small scale. Fuels, however, are presently relatively low value products. To be competitive with present conventional fuels, the cost of large-scale growth, harvesting, and conversion of algae to fuels must be drastically reduced through process improvement and co-production of higher value products.

a. Requirements were listed for biofuels production under fuel catetories:

(1) Methane
(2) Alcohols

(3) Hydrocarbons
(4) Hydrogen

The consensus was that alcohol-from-algae is not promising compared to other means of producing alcohols in Hawaii, so it was excluded from further consideration.

b. Requirements and specifications for biofuels production:

(1) Both micro- and macroalgae are promising candidates for energy production.

(2) Algae should be grown in an integrated system in which carbon dioxide and nutrients are recycled.

(3) The most promising near-term product is methane. Hydrogen, lipids, and other potential production are more long-term possibilities.

(4) The system should be sized to correspond to desired energy output.

(5) Details of system: The system will not be covered. Depth of the microalgal culture system will be 4 to 10 inches. Oxygen supersaturation can be dealt with in two ways: (a) add wastewater containing BOD in a system driven by paddlewheels; or (b) use airlifts to move water. Flow rates in microalgal systems will be 6 to 12 inches/second Methane will be produced from microalgae using facultative ponds. Semicontinuous culture appears critical to high microalgal production. Size (area) of individual microalgal flumes will be 1 to 5 acres. Construction and operating costs must be minimized.

(6) A combined micro-macroalgae culture system may be most efficient, with macroalgae used to polish effluent from microalgal system.

2. Priorities

There are hundreds of species and strains of algae, most of which have not been characterized as to composition, optimum growing conditions, and other properties of importance to the design of commercial production facilities. In the USDOE/SERI microalgae program, species are being collected and characterized for high lipid production in the saline and brackish waters available in the southwestern United States. The Gas Research Institute is supporting research in methane production, primarily from macroalgae. Relatively little attention is being given to marine or freshwater species for Hawaii and the Pacific Basin.

For methane production from microalgae, "anything that grows" (to quote Professor Oswald) is of interest. Pladymonus and Chaetoseros are two suitable species of microalgae. Local species of

Grassilaria, Ulva, and Sargassum are desirable species of macroalgae.

Microalgae known to be good lipid producers are Botryococcus, Chaetoseros, Oedogonium, Spirogyra, and Spirolina. These and other species should be examined to determine whether fuels from microalgae is a viable objective for Hawaii.

For biological production of hydrogen the microalgae Chlamydomonus is of principal interest, although other species are being investigated at SERI and elsewhere.

3. Action Program

Research needs:

a. Complete integrated algal growth and harvesting systems, including carbon dixoide and nutrient recycling and lipid removal processes, are needed for algal production research.

b. Even "high density" microalgal cultures are very dilute. Inexpensive methods are needed for concentration to about 1 percent solids for methane production. For extraction and processing of lipids, high concentrations are required, probably to be realized by harvester concentration with subsequent water removal by other means.

c. Carbon dioxide losses are high in present culture facilities. Means to improve carbonation efficiency are needed.

d. Species screening and characterization research are very important: for macroalgae, to find species that can use bicarbonate as a source of carbon; for microalgae, to determine composition, temperature and salinity tolerance, and ability to resist predators and competitors.

e. Mechanisms and conditions for inducing lipid production by microalgae should be investigated.

f. Harvesting research is needed, including techniques, equipment, and harvesting strategies.

g. Methane production from microalgae using facultative ponds is promising. Research needed is on control of nitrogen and ammonia losses from these ponds.

h. Biological hydrogen production research needs are primarily basic studies of the photosynthetic mechanism of hydrogen production and the cause of accelerated microalgal production in continuous culture.

i. Use of seawater and sewage mixtures should be explored.

Most, if not all, of the research described above is being done for application in Mainland locations. Much of this work will be directly applicable to the Pacific Basin, although many Hawaii specific problems will remain to be solved through research that must be performed here. Future research programs must be designed to take these considerations into account. Also the great potential of OTEC related algae production should be fully researched, using the facilities of the Natural Energy Laboratory of Hawaii (NELH) on the Big Island.

D. SOLID WASTE

1. Issues

Solid wastes considered were categorized into three distinct types: municipal, agricultural, and animal wastes. Municipal wastes were characterized as heterogeneous, with materials in the mixture ranging from newspaper and paper products to glass, metallic materials, and other inert products. Municipal sludge after various treatments is also included. Agricultural waste is considered homogeneous by the solid waste standards because most of it is cellulosic fiber either left in the field to plow over or collected at the processing plant for future disposal. The materials considered agricultural wastes are sugarcane leafy trash and pineapple chop. Most other wastes of this type are small in quantity or have other specific uses. The final type considered was animal waste. Because Hawaii's feedlots are limited in size and quantity, animal waste was considered negligible for further consideration.

2. Priorities

a. The key objectives for solid waste biomass energy are based on the following needs:

(1) Waste disposal,
(2) Electrical power generation by incineration, or
(3) Liquid fuel production.

b. The primary and most common method for waste disposal, since ocean dumping has been ruled out, is land disposal or landfills, the most common method of solid waste disposal. However, there are a number of problems with landfills in Hawaii: land availability and the subsequent cost have been restricting factors in recent years. Water table contamination from leaching chemicals also poses a serious problem.

c. Waste disposal via incineration is an immediate remedy to the landfill problems. The process system is commercially proven and considered by many to be economically feasible. Waste volume is reduced, and the steam or electricity generated can be sold. Depending on the degree of separation desired, glass, metals, and other products can be separated and sold.

d. Liquid fuel production is another method that would reduce solid waste. While the technology is proven, however, its economic cost and market are undefined.

e. Electrical power generation via incineration is then the most promising process. The feedstock can be municipal solid waste as well as agricultural wastes (i.e sugarcane, pineapple, maize, and other products). The volume of feedstock is reduced 90 percent, with the 10 percent residue environmentally acceptable for landfills. (It cannot be assumed that residues from incineration are environmentally acceptable. It also cannot be assumed that stack emissions are safe.) The technology has proven commercially and economically feasible to various sizes of production plants. Assuming separation will be part of the process, then glass, metals, and paper can be recycled.

3. Action Program

Electrical power generation via incineration with commercial and economical technology should be pursued, since landfills will soon be unavailable to handle the large volume of solid waste collected. As biofuel generation technology improves, as the economics become cost-effective, and as alternative electricity production becomes available, then sugarcane bagasse and other agriculture waste could be used as feedstocks for biofuel generation.

The following tasks are recommended:

a. Investigate methods via alternate energy to remove water from sewage sludge to an acceptable moisture content for incineration. Present mechanical methods (i.e. mechanical press and centrifuge) are able to dewater sludge to a 65 percent solids content, thus oil must be added to incinerate the sludge.

b. Follow the conversion technology task group's recommendations to accelerate the conversion process to a cost-effective state.

c. Identify the by-products, residues, and methods from the biomass to liquid or solid fuel conversion process to augment the final disposal.

E. CONVERSION TECHNOLOGY

1. Issues

Transportation fuels should be the first priority for the use of biomass energy in Hawaii, since more than 50 percent of energy consumed in the state is for transportation, and biomass is the only indigenuous resource from which these fuels can be made (except for hydrogen, which is still far in the future). Of liquid transportation fuels consumed in Hawaii in 1982, aviation fuel comprised 57 percent (of which 85 percent was jet fuel); gasoline, 26 percent; and diesel fuel, 17 percent. Almost one-half of the liquid fuel requirement is for jet fuel, but research and new sources for all transportation fuels are needed.

There are a number of options for Hawaii to convert its biomass resources into liquid fuels: any combination of gasoline, distillates, methanol ethanol, and vegetable oils can be derived from biomass. Biomass may be classified as fermentable or combustible. Possible sources and conversion processes for Hawaii are:

a. Fermentable

(1) Sugars and starches are directly fermentable to ethanol.

(2) Lignocellulosics are hydrolized to sugars for fermentation; this is an old technology, not competitive in present markets.

b. Combustible: Current use of combustion is for boiler fuel, with the option of cogeneration for electricity, steam, and process heat. Direct combustion of biomass is not currently used for transportation fuels.

An assessment was made by the Governor's Task Force on Alternative Transportation Fuels, chaired by the Coral Industries Professor of Renewable Energy Research, Michael Antal, of the current status of the different technologies for producing alternative transporation fuels from biomass. This assesssment is contained in the following table:

ALTERNATIVE TRANSPORTATION FUELS TECHNOLOGY ASSESSMENT

Resource	Conversion Process	Alternate Fuel	End Use	Time Frame	Potential Market Impact	Obstacles
Molasses	Fermentation	Ethanol	Octane Enhancer (no vehicle modifications)	5 yrs	10% of gasoline consumption	Economics
Bagasse Wood Chips	"	"	"	5-10 yrs	40% of gasoline consumption	"
Sewage Sludge	Anaerobic Digestion	Methane	State owned vehicle	5 yrs	Negligible	No Advocates
Bagasse Wood Chips Macnut shells and hulls	Gasification	Methanol	Any vehicle (with major modifications	5-10 yrs	100% of gasoline consumption	Technology
		or Methane	Any vehicle (with minor modifications)	5-10 yrs	"	"
Bagasse Wood Chips Macnut shells and hulls	Pyrolysis	Gaseous Hydrocarbons	Any vehicle (with minor modifications)	5-10 yrs	100% of gasoline consumption	Technology
All renewables	Various	Electricity	Automotive (with major modifications	5-10 yrs	100% of ground transportation	Economics
Water	Various	Hydrogen	Jet fuel (with major jet engine modifications)	10 yrs	100% of jet fuel consumption	Technology

2. Priorities

Biomass conversion technologies were evaluated for Hawaii. Priorities were assigned as follows:

a. Thermal conversion

(1) Direct liquefaction of biomass to oil: very low priority for near-term production because it is expensive and inefficient; but may have long-term research interest.

(2) Indirect liquefaction (gasification, pyrolysis):

(a) Syngas to gasoline, diesel, and jet fuels meets current market demands for hydrocarbon fuels, that is, these fuels can be manufactured to run present unmodified vehicles. FIRST PRIORITY.

(b) Syngas to methanol is a nearer term technology than syngas to hydrocarbons. Although it is less marketable, present unmodified vehicles can use it as an octane enhancer or fuel extender (up to about 6 percent methanol). Use of neat methanol fuel, however, requires major engine modification. SECOND PRIORITY.

b. Biochemical conversion

(1) Lignocellulosics to ethanol: breaking down cellulose to sugar, then fermenting the sugar to alcohol.

(a) Acid hydrolysis, although a new technology, is near commercialization, but not yet competitive in the market.

(b) Enzyme hydrolysis is promising but more research is needed.

Ethanol has similar marketing problems to methanol, with even higher production costs. THIRD PRIORITY.

c. Gaseous transportation fuels

(1) Methane production is near term, technically feasible but not economically competitive with natural gas from the Mainland or petroleum-derived gases.

(a) Thermochemical conversion of syngas is technically easy.

(b) Biochemical conversion (anaerobic digestion) is technically feasible, but the economics are marginal.

There is minimal use of gaseous fuels in Hawaii (less than 3 percent of total energy consumed). LOW PRIORITY.

(2) Hydrogen

(a) Electrolysis is the present most widely used method for present production, but very expensive.

(b) Biological production by a number of photosynthetic bacteria species that can produce hydrogen is technically feasible.

(c) Direct solar conversion to produce hydrogen and high-energy chemicals is technically feasible.

Hydrogen as a fuel is not in the near future (10-20 years); its use as transportation fuel would require new engines and a new fuel distribution system. Production is therefore LOW PRIORITY. Basic research, however, is HIGH PRIORITY.

3. Action Program

The following recommendations concerning biomass conversion were endorsed by all panel members. The action program is R&D that is recommended, subject to the priorities given above. The state should:

a. (1) Establish a small fleet of vehicles fueled by neat methanol.

   (2) Establish a small fleet of vehicles fueled by CNG (methane).

   (3) Consider mandating the use of ethanol or methanol based octane enhancers in all State vehicles.

b. Create tax incentives to encourage the production of biomass derived fuels.

c. Provide matching dollars for studies by private industry of fuel production based on local biomass and actively solicit good proposals.

d. Explore the installation of a prototype medium Btu gasifier.

e. Consider committing sufficient resources to attract the Arizona State University's Cellulosic Wastes to Liquid (Jet) Fuels demonstration project to Hawaii, posibly with local industry cooperation (discussed after formal session).

f. Pursue the development of CNG (methane) as a transportation fuel.

g. Support the formation of a regional biomass program (perhaps with the Pacific island communities).

h. Support research and development activities pertaining to alternative sources of transportation fuels at a level commensurate with their importance to the State's economy and the State's investment in other energy technologies.

i. The State should disallow lead additives as octane enhancers from gasoline as soon as possible.

F. PROGRAM POLICY ISSUES AND RECOMMENDED ACTION

1. Issues

The discussion revolved around four primary issues: political, R&D, funding, and industrial partnerships.

a. Political

(1) At the national level, the biomass program is not well organized (compared to other solar technologies such as photovoltaics), and therefore, has not been able to gain a fair share of the budget. In addition, the major blue chip companies are not closely involved. One obvious goal is to organize the field. Hawaii does not even belong to a regional biomass program.

(2) Promotion of biofuels as a field for major support is needed. Arguments should be made relating the high cost of energy imports to their impact on the local economy. For example, if half the oil import bill for generating electricity can be substituted with indigenous sources, with the multiplier effect, justification can be made for tax incentives and establishment of an R&D pool of funds.

(3) Energy has become increasingly important over the past decade but funding has not kept up. The president or chancellor of the University of Hawaii should assess the imbalance of funding and positions through the appropriate mechanisms, including positions and funds transfer to increase HNEI's capacity to carry on the needed work.

(4) Hawaii should have two goals: Self sufficiency for its electrical needs as soon as possible using the most economic means, which might be biomass, and investment in long-range R&D for transportation fuels.

b. R&D and Funding

(1) At the national level, it appears that the Office of Energy Research is doing research that is too basic, and very little of that is in biomass; while the biomass program does not have a mission to do basic research. There is thus a gap of the appropriate kind of fundamental research necessary to carry on a sensible long-term program.

(2) The Department of Energy should do more developmental work involving the private sector in shared risk taking. Cost-shared pilot plants and guaranteed loans are examples.

(3) The national biomass program is funded at a rate of about $30 million/year. This figure should rightly be in the $50-100 million range.

(4) Hawaii can play a part in information and technology transfer in the Pacific.

(5) There was sentiment that the Department of Energy should support projects where chemicals (such as lubricants, etc.) can be products. There is an economic transition period when certain products gain commercial viability. Industry will not actively participate with their own funds unless there can be some hope for profits. These energy-related products can especially be justified where in the whole life cycle total system, energy is conserved.

(6) Biomass is a sleeping giant that has not been given its turn at the funding trough. Why not a biomass program at a level equivalent to fossil fuels, nuclear, or solar? The impact of biomass alone can approach natural gas and can exceed many of the solar options in total.

(7) In Hawaii some means should be set up to ensure a continuous source of research funds, such as through a percentage of all avoided cost revenues or a percentage of the oil import bill. Tax credits should also be provided, especially to pave the way for introduction of alcohol fuels. A suggestion was made for allowing only locally produced fuels to qualify for this credit, but the constitutionality of such legislation is in question.

(8) Hawaii gets no funds for fossil fuel or nuclear R&D, which take up the lion's share of the USDOE budget. As a result, Hawaii should receive a disproportionately larger percentage (on a per capita basis, about 5 to 10 times more the national average) of the available renewable energy funds for equal treatment on energy programs.

(9) As the current administration prefers block grants, energy R&D block grants might be one approach.

c. Industrial Partnership

(1) There was a strong consensus that the government and universities should work more closely with industry. As much as possible, energy projects should be conducted on a joint basis with cost sharing.

(2) The sugar industry should be involved with many of these biofuel projects, including cost sharing for the long term. The infrastructure, fundamental techniques, planning time frame, and institutional constraints mean that an actual energy plantation is five years away. In anticipation of the inevitable, much higher energy prices and more supply dislocations, congressional support should be obtained now.

2. Program Policy Action

a. Planning: It was strongly encouraged that careful planning be initiated with the objectives clearly spelled out. There is a desire and a need to get significant activities started, but only if wise planning and input by those with different viewpoints from both the public and private sectors are considered. A position paper should be prepared promoting biofuels as a field for support.

b. Public Education: One key activity needed is a sound public education program to increase the awareness of the importance of biomass in helping to meet future energy needs. Biomass energy production should be well documented and supported, because misinformation could adversely affect development. The education program should address the concerns raised by community groups on land use and utilization of existing biomass resources, and explore ways by which current landowners can best utilize their biomass resource and still be sensitive to the ecosystem.

c. Information Exchange: There is a need for a journal of biomass energy and for sharing research results from biomass programs with other interested parties. HNEI and the Hawaii Department of Planning and Economic Development are considering publishing a biomass or biofuel newsletter two or three times a year if there is interest. The first issue of HNEI/DPED Hawaii Alternative Transportation Newsletter, released in 1984, contains news on biofuels.

d. Southwest/Hawaii/Pacific Islands Regional Biomass Energy Program: The USDOE supports regional biomass energy programs in most areas of the U.S., but neglect the Southwest, Hawaii, and the Pacific Islands. Hawaii should take the lead role in lobbying Congress to initiate a regional program for the Southwest that would include Hawaii. If not part of the Southwest, perhaps Hawaii and the Pacific Islands might be an appropriate region. More information will be sought.

e. Legislative Support: Nationally, biomass energy in the USDOE budget receives only $30 million a year. Over the past ten years in Hawaii, biomass energy programs in Hawaii received about one-tenth the renewable energy support, although transportation fuels make up over 50 percent of the state's energy needs. Our congressional delegation should be encouraged to work to get needed funding into the USDOE budget process, including support for programs that could be implemented in Hawaii. State and local government support should also be sought through our State and county legislatures for a comprehensive program.

f. Biomass Resource Assessment: A statewide biomass resource assessment is needed that identifies lands that could be utilized for biomass energy plantations. A computer model, possibly accessed by tax map keys, should be developed that would contain needed information on rainfall, insolation, soils, wind regime, terrain slope and elevation, and the pertinent data, and the model might include a yield program and economic analysis program. The initial target areas would be the abandoned sugarcane and pineapple lands and acceptable unused or underused grazing and forest lands.

g. Promising Rapid Growth Species: The recommended high-priority species data should be incorporated into the computer yield model, which in turn can be matched to the target sites under consideration. This would include the variables of irrigation, fertilization, density of planning, spacing, and other field practices.

h. Energy Plantations: The concept of proceeding on a major tree and herbaceous crop planting program, possibly as part of the 100 year centennial of the arrival of the first Japanese immigrants to Hawaii, was strongly endorsed. A third computer model element, building on the previous two elements, would include the economic inputs of capital, operating costs, harvesting costs, and gross revenues, from which net revenues or return on investment could be determined.

A tree planting program on a commercial demonstration size scale was recommended with a target of up to ten 200-acre projects at locations on each major island, at least one to an island where possible. Each site would be in close proximity to a biomass boiler for the first probable use (each acre of trees or grasses could reduce annual oil importation by ten to twenty barrels). Each site would be planned carefully, with a range of practices to provide needed data for future decision-making.

In addition to the 20 to 200 acre energy cane project and the sorghum demonstrations, ten to twenty 20-acre demonstration sites were recommended for planting commercial scale herbaceous/grass crops, again for a learning experience as well as for near-term energy feedstock for biomass boilers.

Although initially the biomass would fuel boilers, it is expected that the ultimate use would be feedstock for liquid and gaseous fuels and high-value chemicals.

The main target parcels would be sugarcane and pineapple lands no longer in production, although other lands, such as recently cleared forests or underused grazing lands, might also be considered. The possibility of using state lands should also be considered.

i. Energy Conversion: Again, the use of biomass or biomass-produced fuel for generating electricity is the most immediate cost-effective use of biomass. In the next five years or so, biomass conversion to liquid and gaseous fuels may become both technologically and economically feasible. Congress has appropriated funds for a medium BTU gas pilot plant that could include the SERI oxygen blown gasification system. Other biomass conversion technologies should also be considered, especially for the possible production of jet fuel. Hawaii, Maui, Molokai, or Kauai could be ideal for such a system, in part depending on the support of each county. Initially the gas could be used for a gas turbine generator or for a quick-recovery, energy storage system. Eventually the gas could be used as fuel for a fuel cell or as a feedstock for liquid or gaseous transportation fuels. State Capital Improvement Program (CIP) funds may be needed as local cost-sharing to secure this SERI system gas or other pilot plant for Hawaii.

PART IV — CONCLUSION AND RECOMMENDATIONS--BIOFUEL PROGRAM FOR HAWAII

These proceedings set forth a plan of action agreed upon by the six technology groups at their final meeting. Priorities and timetables vary for different aspects of the plan and each plan element can stand on its own merit. Comment from the workshop participants on the draft of this report were generally incorporated in the final draft before editing.

The recommendations here highlight the highest priority elements with the most immediate potential for initiating a comprehensive biomass energy plantation research and development program. Basic elements of a biomass resource assessment program and five areas of needed R&D are outlined. In addition, two important possibilities in conversion technologies are recommended, along with an assessment of end use possibilities.

A consensus of support at the workshop was given to a biomass energy plantation demonstration program to secure the necessary information on the growth and yield of the species identified as most promising. This program will also provide needed near-term feedstock for the existing sugar industry biomass boilers, helping to displace imported oil, and in the long term will provide feedstock for production of liquid or gaseous transportation fuels of tomorrow.

A. Conclusions

1. Biomass is the most flexible renewable energy resource and holds great potential as a feedstock for production of electricity and transportation fuels.
    a. Biomass waste (mainly bagasse) is presently the number two source of energy in Hawaii (after imported oil), providing 600 million kWh annually of electricity and an even greater amount of thermal energy for sugar processing requirements.

    b. One ton of 50 percent moisture biomass displaces one barrel of oil for generating electricity.

    c. One ton of biomass, under certain processes and possible use of hydrogen, could provide the feedstock to produce the equivalent of two or more barrels of oil for transportation fuels.

2. Hawaii has a good history of plantation scale agriculture, achieving world leading production of sugarcane and pineapple.
    a. Abandoned sugarcane and pineapple lands in excess of 100,000 acres and an even greater amount of acceptable unused or underused grazing and forest lands properly planted with high-yield biomass crops could displace 10 to 20 million barrels of imported oil each year in the future.

    b. There is sufficient knowledge and capable talent in Hawaii to meet the biofuel challenge.

    c. There is sufficient knowledge of rapid growing species of tree and herbaceous crops that will do well at various locations in Hawaii in energy plantations to provide a significant level of biofuel feedstocks in the future.

B. Recommendations

The following recommendations represent a consensus of the workshop participants.

1. Biomass Resource Assessment: Complete a comprehensive data base for all land in Hawaii using available data for suitability of growing various types of biomass (tree, herbaceous, and algae crops) for energy feedstocks. A computer model should be developed, to include the land resource model, a growth-yield data base, and an economic model, as described below.

   a. Land Resource Data Base: Include all relevant data: range of average annual rainfall, insolation, wind speed; soils; terrain, slope, elevation; ownership, present use, availability; land value (sale, lease, percent of gross and net revenue); zoning, land use classification; and other pertinent information. Access could be by state tax map key which exists for every parcel in the state. Environmental and other impact issues should be adequately addressed.

   b. Growth-Yield Model: Details of ranges of values of growth and harvested yield using input variables of densities and different conditions of the high-priority rapid growth species will be programmed, to be matched with the land resource data base.

   c. BioFuel Economic Model: An economic model, building on the growth-yield model and the land resource data base, that includes variables of front end and capital costs; operating costs (allowing for ranges of costs for irrigation, fertizilizer, herbicides, etc.); harvesting costs (single or multi-year harvesting including various harvesting equipment required and labor); and feedstock conditioning costs for end use alternatives and estimated revenues (by ton or other product value). Output will be net return on investment or other bottom line amount that might be required for decision-making.

2. Conversion Technologies: The progress of the most appropriate near-term energy conversion technologies will be closely monitored, and where possible, preliminary work will be carried on in Hawaii on biomass feedstock characterization.

   a. Pilot plants that could be sited in Hawaii should be considered and State CIP funding aggressively sought if the plant is decided to be a high priority for Hawaii's future transportation fuel objectives.

   b. The production of jet fuel from biomass is another high priority research area that should be developed more fully with legislative support.

3. Basic Research Program: Other promising rapid-growth species should be identified and programs initiated to secure data for future decision-making to the full extent that funding allows. A trial plantation might be installed as part of 1985 Statewide planting of 1 million trees to commemorate the centennial of Japanese immigration to Hawaii and the 150th anniversary of the founding of the Hawaiian Sugar Planters' Association.

   a. The recommendations of the workshop participants will constitute the priority listing for selection of plant species.

   b. Areas where processes can be combined will receive a special priority, such as in the possible use of algae for producing fuel and for cleaning up an environmental problem, e.g. to aid in the removal of hydrogen sulfide and silicon dioxide in geothermal fluids.

   c. High priority should be given to R&D of harvesting equipment and techniques, breeding and genetics, coppicing, and impacts; and also for fundamental research related to systems integration and biomass conversion to fuels.

   d. Possible hybrids should be investigated and developed further.

   e. In respect to solid waste, research to dewater sewage sludge is important as well as research to identify and develop ways to use the by-products and residues.

4. End Use: An assessment should be made of various end use options, for example, methanol, ethanol, or hydrocarbon fuels for transportation, and direct combustion versus gasification for boiler fuel. The overall technical and economic feasibility of development of each option, as it might be constrained by public social and environmental concerns, should be investigated.

5. Biomass Energy Plantation Demonstration Planting Program: There are some well-proven, rapid-growth biomass species for semitropical and tropical areas like Hawaii. The remaining task is to demonstrate the techniques and feasibility of growing these species in energy plantations The goal is to document the best conditions for proven successful and economically viable energy plantations to assist private-sector investors to fully utilize their resources. This program needs both public and private cooperation and financial support. The program outlined in the Plan For Action recommends:

   a. Ten commercial scale tree farms of approximately 200 acres each, with at least one on each island, planted with a variety of species (e.g., inclusion of legumes to provide nitrogen).

   b. A 200-acre site for a full field trial of the "energy cane" concept, and possibly up to 200 acres of sorghum to produce both sugar and cellulose.

   c. Ten to twenty 20 acre sites for field trials of grass crops.

The primary lands to be used are abandoned cane and pineapple fields as well as appropriate unused or underused grazing and forest lands, in both public and private ownership (with the full cooperation of the landowners).

This near-term program could realize 2,000 acres of tree crops, 400 acres of energy cane and sorghum, and 200 to 400 acres of other grass and herbaceous crops. The ultimate goal would be the realization of biomass energy plantations in excess of 100,000 acres. This would save millions of barrels of imported oil each year as well as provide economic development opportunities and jobs, improve the State's and the Nation's balance of trade, and reduce Hawaii's vulnerability to future oil supply disruptions.

6. Hawaii Biomass Energy Association: A proposal was made to establish an association or commission that would promote the use and development of biomass energy in the state of Hawaii. It is recommended that the association be incorporated as a not-for-profit scientific and educational forundation under IRS code. It was felt that sufficient interest existed at the conference to provide the base necessary to establish the association.

APPENDIX A

PACIFIC BASIN BIOFUEL WORKSHOP
November 1-2, 1984   Makaha Sheraton

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PACIFIC BASIN BIOFUEL WORKSHOP
November 1-2, 1984 Makaha Sheraton

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November 1-2, 1984 Makaha Sheraton

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PACIFIC BASIN BIOFUEL WORKSHOP
November 1-2, 1984 Makaha Sheraton

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Mr. ROTUNDO. Thank you, Mr. Chairman, and Members. I am pleased to speak on behalf of the State of Florida and to share with you our appreciation for your past efforts in regard to the support this subcommittee has given to solar and conservation energy technologies.

We have, as Mr. Takahashi has said, a consortium between Florida and Hawaii working together for obvious reasons, because our states have a lot of natural energy resources. Rather than repeating some statements you have heard already, I would just like to simply indicate my support for the two areas of technology research we have discussed today, both of which have had extensive reviews in the area of ocean energy, where we have had a cooperative program for the last two years with Hawaii based on the 1984 Office of Technology Assessment study.

We support in Florida the 165 kilowatt electric proof of principal experiment recommended. We appreciate this committee's support for funding levels higher than the Administration has requested, and I think that $4.2 million is probably a minimum level for having an effective program.

We in Florida believe that a phased approach similar to that outlined by the Science and Technology Committee is probably the proper way to proceed.

Second, the study funded in the area of hydrogen research ascribed a high value to some areas of interest, not only for our two states but other states in the Nation. We would recommend a level of $1.2 million to investigate some of the promising processes which were examined by this study and I believe that if I were to summarize those, they would be high temperature cell design, solid polymer electrolyzers and hybrid electrolytic cycles. We believe that these technologies of OTEC and hydrogen can help secure our independence from unreliable energy sources.

I appreciate your allowing us this time.

Thank you.

[The statement of Mr. Rotundo follows:]

Remarks by Mr. Louis Rotundo of the Florida Solar Energy Center before the House Appropriations Subcommittee on Energy and Water Development.

April 15, 1986.

Chairman Bevill and members of the House Appropriations Subcommittee on Energy and Water Development Appropriations, it is a pleasure to appear before you today to discuss the State of Florida's interest in solar and renewable energy. The support which this Committee has given in the past to solar/conservation efforts has fostered the emergence of energy-saving technologies with commercial potential. We must continue our efforts and not fall victim to a complacency over what will surely be a short-lived decline in energy costs. Your recent decision regarding President Reagan's deferral request is to be commended as consistent with these past efforts.

Recognizing the inevitable short supply of energy from non-renewable sources, I wish to address two renewable technologies. Each merits further research support.

First, over the past two years, the states of Florida and Hawaii have established a closely integrated program of research on open-cycle ocean thermal energy conversion. Based on the 1984 Office of Technology Assessment review, a 165 KW_e proof of principle experiment was recommended. This committee has supported that multi-year effort through funding levels higher than the Administration's inadequate requests. I urge you to continue that support and believe that $4.2 million -- 15% less than last year's allocation -- represents the minimum level for an effective program. This work should continue the phased approach for the 165 KW_e experiment as outlined by the Science and Technology Committee.

Second, during Fiscal Year 1985, this committee agreed to provide funds to investigate the potential for hydrogen production from renewable energy sources. The study, although delayed by the Department of Energy, is now essentially complete. The extensive review by Florida and Hawaii -- two states much interested in hydrogen utilization -- ascribe a high value to advanced cycle electrolytic processes for hydrogen production. I believe that as a continuation of prior efforts, and notwithstanding the Administration's apparent disinterest in this important program, funding level of $1.2 million is appropriate and necessary for a hydrogen program in high temperature cell design, solid polymer electrolyzers, and hybrid electroytic cycles as alternatives to water splitting.

When developed, the technologies of ocean thermal energy conversion and hydrogen production can help insure our nation's independence from unreliable energy sources. I urge your funding consideration for these technologies and thank the committee for the time it has allowed me.

Mr. **Bevill**. Thank you very much. We certainly will work very closely with Congressman Akaka and do the best we can to accommodate you.

[The following was provided for the record:]

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MICHAEL A. SWIGER

OF COUNSEL
HOWARD ELIOT SHAPIRO

April 16, 1986

House Appropriations Committee
Subcommittee on Energy and Water Development
2362 Rayburn House Office Building
Washington, D.C. 20515

Attention: Beth L. Whipp

Dear Ms. Whipp:

Enclosed please find three copies of testimony on behalf of Hawaiian Electric Industries to be included in the record of the Subcommittee's hearings on the fiscal year 1987 Energy and Water Development Appropriations bill.

The testimony pertains to funding for the Mod-5B project, a Department of Energy project that is within the Subcommittee's jurisdiction. The Mod-5B was discussed by Administration witnesses at a hearing before the Subcommittee on March 6, 1986.

Thank you for your assistance.

Sincerely,

Ben Yamagata

Ben Yamagata

BY/ps
Enclosures

WRITTEN TESTIMONY OF HAWAIIAN ELECTRIC INDUSTRIES, INC.

HONOLULU, HAWAII

Submitted to the House Appropriations Committee
Subcommittee on Energy and Water Development
April 16, 1986

INTRODUCTION

Hawaiian Electric Industries (HEI) urges the Subcommittee on Energy and Water Development to recommend the appropriation of funds in fiscal year 1987 to complete the Mod-5B large-scale wind turbine program. HEI would also like to thank the Members of the Subcommittee for acting to overturn the Administration's proposed deferral of fiscal year 1986 appropriations for the Mod-5B. If Congress acts expeditiously to make funds available in fiscal years 1986 and 1987, then the delays to the program and the likely added costs caused by the deferral of fiscal year 1986 Mod-5B funding can be minimized.

By seeking a deferral of current year appropriations, the government appears to be ignoring its commitments to the private sector, and the Department of Energy seems to be displaying an impervious attitude to repeated expressions of Congressional intent that the Mod-5B be completed. From the standpoint of HEI, the deferral of appropriations and the risk of losing the private investment already made in the Mod-5B have certainly dampened enthusiasm toward entering into future partnerships with the Federal government. Especially now, when the government is daily expressing its interest in public/private partnerships, the federal establishment should realize that its actions appear to be speaking louder than its words. Moreover, whenever the government commits itself to a program and the private sector subsequently spends large amounts in support of the program and then government changes direction in mid-stream, the government's credibility with private industry inevitably suffers.

The Mod-5B is a realistic, near-term technology that HEI hopes to utilize in the commercial production of electricity. Successful demonstration of this wind machine will give Hawaii another option for harnessing the considerable potential of wind energy that exists on the Islands. Further, successful development will better enable the State to shed its dependence upon imported fossil fuels. Hawaiian Electric Industries is committed to wind energy development even at a time when plunging oil prices have made renewable energy alternatives less and less economically attractive. Recently, HEI has constructed and is currently operating a 9 megawatt windfarm utilizing fifteen prototype 600 kilowatt wind turbines. This windfarm is situated near the site where the 3.2 megawatt Mod-5B wind machine will be located. Although available to the commercial market, even these smaller wind machines have experienced start-up problems. This experience from HEI's currently operating wind turbines underscores the high risks still associated with emerging technologies that are designed to use alternative energy resources. Nevertheless, once the Mod-5B has been adequately tested and placed into commercial service it is anticipated that Hawaii may be the site for several additional machines. Also, there are wind regimes throughout the world where the Mod-5B technology would appear to be a promising means by which to produce electricity.

CURRENT STATUS OF DEVELOPMENT

Since the mid-1970's, the government has invested more than $160 million in the development of wind turbines and approximately $70 million has been expended in development of the Mod-5B alone. Congress has described this wind machine as the "centerpiece" and culmination of ten years of federal effort to develop multi-megawatt wind turbines. As a part of the existing program, The Boeing Company, under contract to the National Aeronautics and Space Administration (NASA), which administers the Mod-5B program under an interagency agreement with the Department of Energy, is required to fabricate and test the wind machine. HEI, pursuant to a separate contract with NASA, is obligated to purchase the Mod-5B prototype for approximately $4.0 million, subject to certain adjustments, once the wind machine is constructed and successfully tested. In an effort to ensure that the schedule called for in the contracts is maintained, Hawaiian Electric Industries has already invested $1.6 million toward completion of this project. These funds were spent in reliance upon the Federal government's commitment to finish the fabrication and testing of the Mod-5B.

For fiscal year 1986, Congress appropriated $12 million for the Mod-5B program. However, on February 5, 1986, the President submitted to Congress a deferral of $10.24 million of these funds. Apparently the $1.76 million in remaining appropriations will be used to terminate the Mod-5B program. This would be consistent with representations in the Department of Energy's budget documents which indicate that the Mod-5B program is expected to be phased-out in fiscal year 1986. No funds were requested by the Administration for the Mod-5B in fiscal year 1987.

Cancellation of the program now would be particularly ironic because little work remains to be done before the wind machine can be placed into service. Through the contract with Boeing, NASA has completed engineering, design and procurement of all major hardware components and has prepared the foundation and erected the 190 foot tower. The rotor, nacelle, generator and gearbox are procurred and awaiting shipment to Hawaii. HEI has prepared the site for the wind machine, including all necessary access roads, on the Island of Oahu and has procured the substation, erected transmission lines to interconnect with the existing electricty grid, and installed necessary communications links.

The deferral of F.Y. 1986 funds has meant that shipment to Hawaii of the hardware has been suspended. Also, the deferral has caused The Boeing Company to reduce personnel assigned to the Mod-5B program to a skeleton staff. HEI is concerned that if currently appropriated funds are not released immediately, highly skilled technical personnel who have been associated with this project for many years will be permanently assigned elsewhere and the project will suffer a significant loss in necessary expert personnel.

Prior to the notice of deferral, shipment of the major components of the wind machine to Hawaii was scheduled to take place in April 1986. Had that shipment been made, the first rotation of the turbine was expected to occur in September 1986. Obviously, that schedule can not now be met. On the basis of information previously provided to the Subcommittee by The Boeing Company it appears that the machine's components could be shipped to Hawaii approximately two months after fiscal year 1986 funding is made available. The first rotation of the Mod-5B would then take place approximately six months after the components are shipped.

While this is still a research and demonstration project, with the attendant uncertainties of such projects, it should be borne in mind that NASA and Boeing believe that there are no known technical problems which will impede the successful completion of the Mod-5B. The most serious obstacle to completion of the program is the availability of promised federal funding.

FUNDING NEEDED TO COMPLETE MOD-5B

An additional $4.5 million in F.Y. 1987 funds will be required to complete the scope of work called for in NASA's contract with The Boeing Company. This additional funding assumes that the $12 million already appropriated by Congress for fiscal year 1986 will be made available toward completion of the Mod-5B program. The Boeing Company has previously indicated to the Congress that an additional appropriation of $3.0 million in F.Y. 1987 funds would be sufficient to complete the program. This amount assumed that there would be no delays to the program resulting from the proposed deferral and secondly that the scope of work required under the contract between Boeing and NASA with respect to the testing of the completed wind machine could be modified and reduced. Delays, of course, have occurred and if the scope of work is not reduced, then it is estimated that $4.5 million will be required in the upcoming fiscal year.

In the final analysis, the cost to complete the large wind turbine program should be compared with the costs that the government will incur to terminate the Mod-5B program now. When these comparisons are made, it becomes clear that any claimed savings to the government from canceling the program are largely illusory.

Under the sales agreement through which HEI would purchase the Mod-5B prototype, the government is obligated to restore the site if the program is terminated. NASA personnel have estimated that site restoration will cost between $1.0 million and $1.5 million. HEI has already invested $1.6 million of its own funds in performance of its contractual obligations and in anticipation of the purchase of the wind machine. Further, the government will lose the purchase price of approximately $4 million that would have been paid to acquire the completed and tested machine. From the standpoint of the primary contractor, The Boeing Company, termination costs could range from $1.0 million to $5.5 million, because Boeing has advanced its own funds to the project in anticipation of being repaid by the government.

Taken together, these termination costs and lost revenues to the government may range from between $7.6 million to as much as $12.6 million. At the lower range, termination would offer a "savings" of approximately $8.9 million over the costs of completing the program. At the upper limit, termination would "save" only $3.9 million. And in either case, these amounts are relatively inconsequential when compared to the $160 million already invested in development of wind turbine technology, and the nearly $70 million already spent on the Mod-5B.

CONCLUSION

The substantial federal investment in the development of the large wind turbine will be seriously compromised if the Mod-5B is not completed. Termination of the program now could result in the scrapping of nearly 500 tons of high technology hardware that is only months away from use. What is more, the government will have spent millions of dollars on the Mod-5B without having successfully completed a prototype. There is no assurance that all of the effort expended over the course of the last several years and all of the technology developed with federal funds will ever be put to beneficial use if this "centerpiece" project is not completed.

Disapproval by Congress of the fiscal year 1986 deferral and additional funding in the amount of $4.5 million for fiscal year 1987 is the only way to maximize the return on the government's substantial investment.

The timing of the Congress's action to disapprove the Mod-5B deferral is also important. The private sector needs to receive a clear signal from the Congress as soon as possible regarding the government's intentions with respect to the availability of funds to complete the Mod-5B. Each week of uncertainty adds to the costs of the project and increases the very real jeopardy that the large scale wind turbine project will be abandoned by the private sector.

TUESDAY, APRIL 15, 1986.

CENTRAL UTAH PROJECT

WITNESSES

HONORABLE JAMES V. HANSEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH

HONORABLE HOWARD C. NIELSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH

HONORABLE DAVID S. MONSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH

ROBERT HILBERT, CHAIRMAN OF THE BOARD OF DIRECTORS, CENTRAL UTAH WATER CONSERVANCY DISTRICT

Mr. BEVILL. We have our good friends and colleagues, Congressman Nielson, Congressman Hansen and Congressman Monson here. The Chair recognizes all three of you and any one you may want to bring to the table with you.

Your prepared statements will be made part of the record. You may just summarize your statements or proceed as you wish.

Mr. HANSEN. Mr. Chairman, if I might go first, I would appreciate that.

Mr. Chairman, I would just like to submit a brief statement if I may. I appreciate the opportunity to appear before this committee today and express my support for the Central Utah Water Project. I also have the testimony of the Governor of Utah, Norman H. Bangerter, and with your permission I would submit that for the record.

Mr. BEVILL. Without objection, it will be made part of the record.

[The statement of Governor Bangerter follows:]

STATEMENT OF
NORMAN H. BANGERTER
GOVERNOR
STATE OF UTAH

BEFORE THE
ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

April 15, 1986

I am honored as Utah's Governor to represent Utah and its citizens in support of the President's fiscal year 1987 budget recommendation to the Congress of the United States for the Central Utah Project.

The people of Utah are totally in support of the CUP. They have demonstrated that support in a strong and definite manner by approving the Supplemental Repayment Contract to pay their share of the Project's cost. On November 19 of last year the people of the twelve most populous counties directly affected by the CUP voted 3 to 1 to support the continued construction of the Project. The largest turnout in Utah for a special election of this kind was recorded. The citizens of the State voiced their support for a construction plan that has been ongoing for the past 20 years. This overwhelming support for the timely completion of the CUP is a clear indicator that the need for the Project as well as the desires of the people of the State of Utah are drastically important.

Current and potential benefits from the Project range from municipal and industrial water to agriculture. In between are myriad of spinoffs such as wildlife, recreation, and flood control. The Central Utah Project is the only major project for which Utah is currently receiving federal funding. The

State has solicited this assistance in the firm belief that the CUP benefits not only Utah, but the region and the nation as a whole.

Utah's economic growth is very healthy but a healthy outlook for Utah's future industrial and resource growth along with its increasing population can be determined largely by development of the State's limited water supplies. The planned delivery of water by the Central Utah Water Conservancy District to the State's largest populated area, the Wasatch front, has become an increasingly critical matter. City and County water officials caution that planning for this population explosion can only proceed based on the assumption that Project water will be available in the next few years.

Tourism is one of the leading industries in the State of Utah and has created enormous demands for recreation in our State. This demand is expected to continue over the next 20 years and without the development of our reservoirs and water supplies that center around the CUP, our tourism industry could suffer greatly. Therefore, I totally support President Reagan's 1987 fiscal year recommendation of $88,788,000 for continued construction towards completion of the Central Utah Project. The President's funding request is as follows:

Unit	Amount
Section 5 (Reimbursable)	
Bonneville	$83,793,000
Upalco Unit	50,000
Jensen Unit	303,000
Uintah Unit	100,000
	$84,246,000
Section 8 (Non Reimbursable)	
Fish, Wildlife & Recreation Bonneville Unit	$ 4,542,000
Total Fiscal 1987 Budget Recommendation	$88,788,000

The Central Utah Water Conservancy District, sponsor of the Central Utah Project for the State, through its Board of Directors, has invested approximately $30 million to construct facilities in anticipation of completion of the units of the CUP. In this effort, the District has shown strong support of the government's cost sharing formulas and has been willing to up front portions of the CUP construction.

The State of Utah has committed millions of dollars over the past years for bonding programs to develop its water resources, but even with this type of commitment, it is not capable on its own to do all that must be done to develop our water resources without federal help.

As a participating project under the Colorado River Storage Act passed by Congress in 1956, the State has appreciated the support that Congress has given in the development and construction of the CUP. This Project has been the heart of our State water plan. The State water plan notes that the potential need for water greatly exceeds the water supply. At the present time, large quantities of water are not being fully utilized due to the lack of reservoir capacity to store and regulate these waters. With the completion of the CUP, facilities will be in place to accommodate water storage and provide the central conveyance systems that are necessary.

The State's water efforts are directed in other areas aside from impounding water supplies. The State is working not only towards reclamation but conservation in utilizing many methods of development. The State provides financial encouragement for conservation practices leading to efficient irrigation. Wise use of ground water is being considered by municipal and industrial systems as well as agriculture.

I support the Colorado River Basin Water Quality Improvement program which insures the commitment that the states and the federal government have made to maintain the quality of the Colorado River. We are mindful of the increased salinity that is created for downstream users and therefore commit our support to this project.

In conclusion, I want you to know that Utahn's appreciate your support of the Central Utah Project and encourage your continuing endorsement to fund the Project to its completion.

Mr. HANSEN. Thank you.

Much has been made of the fact that the costs of this water project have escalated dramatically over the course of the last twenty years. During this time the need for the water in Utah has also increased tremendously. The people of Utah appreciate very much the support and cooperation of this committee through these two decades of construction.

As you may recall, Mr. Chairman, we worked together last year on the Solomon-Miller amendment to the Energy and Water appropriations bill. Under the terms of that amendment, Congress prohibited the further obligation of appropriated construction funds for the Bonneville unit until a supplemental repayment contract for municipal and industrial water supplies, sufficient to recover all allocable reimbursable costs, plus interest, had been executed.

Further, the contract had to be submitted to the Congress with a 100-day review period.

I am pleased to report that all this has been accomplished and we are ready to continue with funding for the project. The terms of the Solomon-Miller amendment have been complied with completely. A new repayment contract has been negotiated, signed by the parties and overwhelmingly approved by the voters of Utah. The contract was submitted to Congress on December 12, 1985 and on March 21, 1986 the 100-day period elapsed enabling further construction on the project to proceed.

Mr. Chairman, the time has come to leave delay and disagreement behind and forge ahead toward a prompt and efficient completion of this project. Working with the Bureau of Reclamation, the Central Utah Water Conservancy District has developed a plan which will see the total completion of this project by 1995. The people of Utah have put their money on the table. Now it is time for the Congress to move ahead to complete this project in an expeditious manner.

The Administration's fiscal year 1987 budget requests $88.7 million, it would be both unwise and wasteful to abandon it at this stage.

Mr. Chairman, I want to say again how much we appreciate the committee and what you have done on this, and I have been very proud of the people of Utah because they have had the courage to stand up and say yes, we will meet it, they have gone to the polls, they have voted and as far as I am concerned, the people in Utah very much want to see water delivered and see this thing come to completion.

We appreciate the cooperation of all of you on the committee.

[The statement of Mr. Hansen follows:]

STATEMENT OF THE
HONORABLE JAMES V. HANSEN
BEFORE THE
HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

APRIL 15, 1986

MR. CHAIRMAN, I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE THIS COMMITTEE TODAY AND EXPRESS MY SUPPORT FOR THE CENTRAL UTAH WATER PROJECT.

I ALSO HAVE THE TESTIMONY OF THE GOVERNOR OF UTAH, NORMAN H. BANGERTER, WHICH, WITH YOUR PERMISSION, I WOULD LIKE TO SUBMIT FOR THE RECORD.

MUCH HAS BEEN MADE OF THE FACT THAT THE COSTS OF THIS WATER PROJECT HAVE ESCALATED DRAMATICALLY OVER THE COURSE OF THE LAST 20 YEARS. DURING THIS TIME THE NEED FOR THE WATER IN UTAH HAS ALSO INCREASED TREMENDOUSLY. THE PEOPLE OF UTAH APPRECIATE THE SUPPORT AND COOPERATION OF THIS COMMITTEE THROUGH THESE TWO DECADES OF CONSTRUCTION.

AS YOU MAY RECALL, MR. CHAIRMAN, WE WORKED TOGETHER LAST YEAR ON THE SOLOMON-MILLER AMENDMENT TO THE ENERGY AND WATER APPROPRIATIONS BILL. UNDER THE TERMS OF THAT AMENDMENT, CONGRESS PROHIBITED THE FURTHER OBLIGATION OF APPROPRIATED CONSTRUCTION FUNDS FOR THE BONNEVILLE UNIT UNTIL A SUPPLEMENTAL REPAYMENT CONTRACT FOR MUNICIPAL AND INDUSTRIAL WATER SUPPLIES, SUFFICIENT TO RECOVER ALL ALLOCABLE REIMBURSABLE COSTS, PLUS INTEREST, HAD BEEN EXECUTED. FURTHER, THE

CONTRACT HAD TO BE SUBMITTED TO THE CONGRESS WITH A 100 DAY REVIEW PERIOD.

I AM PLEASED TO REPORT THAT ALL THIS HAS BEEN ACCOMPLISHED AND WE ARE READY TO CONTINUE WITH FUNDING FOR THE PROJECT. THE TERMS OF THE SOLOMON-MILLER AMENDMENT HAVE BEEN COMPLIED WITH COMPLETELY. A NEW REPAYMENT CONTRACT HAS BEEN NEGOTIATED, SIGNED BY THE PARTIES AND OVERWHELMINGLY APPROVED BY THE VOTERS OF UTAH. THE CONTRACT WAS SUBMITTED TO CONGRESS ON DECEMBER 12, 1985 AND ON MARCH 21, 1986 THE 100-DAY PERIOD ELAPSED ENABLING FURTHER CONSTRUCTION ON THE PROJECT TO PROCEED.

MR. CHAIRMAN, THE TIME HAS COME TO LEAVE DELAY AND DISAGREEMENT BEHIND AND FORGE AHEAD TOWARD A PROMPT AND EFFICIENT COMPLETION OF THIS PROJECT. WORKING WITH THE BUREAU OF RECLAMATION, THE CENTRAL UTAH WATER CONSERVANCY DISTRICT HAS DEVELOPED A PLAN WHICH WILL SEE THE TOTAL COMPLETION OF THIS PROJECT BY 1995. THE PEOPLE OF UTAH HAVE PUT THEIR MONEY ON THE TABLE. NOW IT IS TIME FOR THE CONGRESS TO MOVE AHEAD TO COMPLETE THIS PROJECT IN AN EXPIDITIOUS MANNER. THE ADMINISTRATION'S FY '87 BUDGET REQUESTS $88.7 MILLION FOR THE CENTRAL UTAH PROJECT. BECAUSE OF THE CRITICAL WATER NEEDS THIS PROJECT WILL MEET AND THE INVESTMENT OF OVER $600 MILLION, IT WOULD BE BOTH UNWISE AND WASTEFUL TO ABANDON IT AT THIS STAGE.

MR. CHAIRMAN, I WANT TO SAY AGAIN THAT I APPRECIATE THE OPPORTUNITY TO PARTICIPATE IN THESE IMPORTANT HEARINGS.

Mr. **Bevill**. Thank You.

Howard, you may proceed.

Mr. **Nielson**. Mr. Chairman, I am pleased to have the opportunity to be here and I commend the Chairman for holding this hearing. I want to express my appreciation for the good work you have done over the past years, especially for the Central Utah project since 1964, probably about the time you came to this Congress.

The Energy and Water Development Appropriations Act of 1986 was amended on the House floor last year by the Miller-Solomon amendment. This amendment prohibited the expenditure of further funds for the construction of the Bonneville Unit of the Central Utah Project until a supplemental repayment contract had been approved by the voters of the Central Utah Water Conservancy District and Congress had been given 100 days to review that contract.

On November 19, 1985, a new supplemental repayment contract was approved by 73 percent of the voters. The contract was signed by the District and the Bureau of Reclamation on November 25, 1985 for the requisite 100-day review period.

As Congressman Hansen indicated, we have met the requirements of the Miller amendment completely. I think the time has come to end the debate and move forward with construction of the Bonneville unit. The Central Utah Project has developed a plan as explained. It is essential that funding be provided each year until that time.

Unlike most other projects, this project is very complex and not easily understood. When completed, CUP will include 14 new reservoirs, several enlarged reservoirs, several hundred miles of canals, aqueducts and tunnels, over ten pumping stations and several hydeo-electric powerplants.

As a result of these complexities, many have misunderstood the objectives of the project and have felt it to be unnecessary. Mr. Chairman, you and others on this subcommittee are numbered among the few that understand this project.

We are just now starting to realize some of the benefits of this project. There has been a great deal of time and money invested in the CUP. The Bonneville unit project would be unable to meet and deliver the water needs of Salt Lake County. In my opinion, it would be irresponsible at this stage to discontinue the funding of this project and the Bonneville Unit in particular. Without it, there would be no way to deliver water to Congressman Monson's district.

I would like the Chairman and the other members of this committee to understand that I continue to strongly support the Central Utah Project. All resources that flow from my district eventually go to Congressman Monson's district. He has two counties and I have eleven counties, but we are all together on this. [It is unanimous]. I continue to support the project. I feel the delegation has complied with the conditions set forth by the Miller-Solomon amendment. I think we have done our share. We appreciate your assistance and I again thank you.

[The statement of Mr. Nielson follows:]

STATEMENT OF THE

HONORABLE HOWARD C. NIELSON

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

APRIL 15, 1986

MR. CHAIRMAN, I AM PLEASED TO HAVE THE OPPORTUNITY TO TESTIFY TODAY AND I COMMEND THE CHAIRMAN FOR HOLDING THIS HEARING. I WANT TO EXPRESS MY APPRECIATION TO THE CHAIRMAN FOR HIS WILLINGNESS TO WORK WITH THE UTAH CONGRESSIONAL DELEGATION ON FUNDING FOR THE CENTRAL UTAH PROJECT.

AS YOU MAY REMEMBER, THE ENERGY AND WATER DEVELOPMENT APPROPRIATIONS ACT OF 1986 WAS AMENDED ON THE HOUSE FLOOR LAST YEAR BY THE MILLER/SOLOMON AMENDMENT. THIS AMENDMENT PROHIBITED THE EXPENDITURE OF FURTHER FUNDS FOR THE CONSTRUCTION OF THE BONNEVILLE UNIT OF THE CENTRAL UTAH PROJECT UNTIL A SUPPLEMENTAL REPAYMENT CONTRACT HAD BEEN APPROVED BY THE VOTERS OF THE CENTRAL UTAH WATER CONSERVANCY DISTRICT AND CONGRESS HAD BEEN GIVEN 100 DAYS TO REVIEW THAT CONTRACT.

ON NOVEMBER 19, 1985 A NEW SUPPLEMENTAL REPAYMENT CONTRACT WAS APPROVED BY 73% OF THE VOTERS. THE CONTRACT WAS SIGNED BY THE DISTRICT AND THE BUREAU OF RECLAMATION ON NOVEMBER 25, 1985 AND THEN WAS SUBMITTED TO THE CONGRESS ON DECEMBER 12, 1985 FOR THE REQUISITE 100-DAY REVIEW PERIOD.

I AM HEAR TODAY TO OFFICIALLY NOTIFY THE CHAIRMAN THAT ALL THE REQUIREMENTS OF THE MILLER AMENDMENT HAVE BEEN MET. I FEEL THE TIME HAS COME TO END THE DEBATE AND TO MOVE AHEAD WITH THE CONSTRUCTION OF THE BONNEVILLE UNIT. THE CENTRAL UTAH WATER CONSERVANCY DISTRICT HAS DEVELOPED A PLAN WHICH WILL RESULT IN THE COMPLETION OF THE PROJECT BY 1995. HOWEVER, IT IS ESSENTIAL THAT ADEQUATE FUNDING BE PROVIDED EACH YEAR FROM NOW UNTIL 1995.

MR. CHAIRMAN, THE CENTRAL UTAH PROJECT UNLIKE MOST OTHER WATER PROJECTS IS COMPLEX AND NOT EASILY UNDERSTOOD. WHEN

COMPLETED THE CUP WILL INCLUDE OVER 14 NEW RESERVOIRS; SEVERAL ENLARGED RESERVOIRS; SEVERAL HUNDRED MILES OF CANALS, AQUEDUCTS AND TUNNELS, OVER TEN PUMPING STATIONS AND SEVERAL HYDRO-ELECTRIC POWERPLANTS. AS A RESULT OF THESE COMPLEXITIES, MANY HAVE MISUNDERSTOOD THE OBJECTIVES OF THE PROJECT AND HAVE FELT IT TO BE UNNECESSARY. MR. CHAIRMAN, YOU AND OTHERS ON THIS SUBCOMMITTEE ARE NUMBERED AMONG THE FEW THAT UNDERSTAND THIS PROJECT.

WE ~~IN~~ THE STATE OF UTAH, ARE JUST NOW STARTING TO REALIZE SOME OF THE BENEFITS OF THIS PROJECT. THERE HAS BEEN A GREAT DEAL OF TIME AND MONEY INVESTED IN THE CUP. THE BONNEVILLE UNIT IS CRITICAL TO THE CENTRAL UTAH PROJECT, WITHOUT THIS UNIT THE PROJECT WOULD BE UNABLE TO MEET AND DELIVER THE WATER NEEDS OF SALT LAKE COUNTY. IN MY OPINION IT WOULD BE IRRESPONSIBLE AT THIS STAGE TO DISCONTINUE THE FUNDING OF THIS PROJECT AND THE BONNEVILLE UNIT IN PARTICULAR.

I WOULD LIKE THE CHAIRMAN AND THE OTHER MEMBERS OF THIS COMMITTEE TO UNDERSTAND THAT I CONTINUE TO STRONGLY SUPPORT THE CENTRAL UTAH PROJECT ③ I FEEL THAT THE UTAH CONGRESSIONAL DELEGATION HAS COMPLIED WITH THE CONDITIONS OF THE MILLER AMENDMENT AND HAS TRIED TO WORK WITH THOSE WHO HAVE HAD CONCERNS WITH THE PROJECT. AGAIN, I HAVE APPRECIATED YOUR ASSISTANCE AND SUPPORT IN THE PAST. I HAVE ALWAYS FOUND THE CHAIRMAN AND THE MEMBERS OF THIS COMMITTEE TO BE HELPFUL AND RESPONSIVE TO MY CONCERNS AND NEEDS. I THANK YOU AND HOPE THAT WE CAN CONTINUE WORKING TOGETHER.

Mr. BEVILL. Thank you.

Mr. MONSON. Thank you very much, Mr. Chairman.

I join with my two colleagues in expressing appreciation to you and the committee for your understanding, and the efforts you have made to see this project move ahead.

I would like to just say a few words this afternoon concerning the appropriations for the Central Utah Project, and the Bonneville Unit in particular.

Salt Lake County, which I represent, needs the Bonneville Unit to be completed as soon as possible. Salt Lake County has already overbuilt its water supply. The last major water supply for this area came with the Deer Creek Project, which was built between 1938 and 1941. Most of that water was subscribed for by metropolitan water districts for the benefit of seven cities, Salt Lake City and six cities in Utah County. None was subscribed for by Salt Lake County.

The population of Salt Lake County in 1940 was only 212,000. Today that number now exceeds 700,000, for an increase of over 300 percent. By the year 2000 it is projected to be 912,000. Over the next 25 years, Salt Lake County is projected to increase by 425,000 people. This growth will require an additional 140,000 acre-feet of water for municipal and industrial uses. Only 70,000 acre feet of this water, or about half of what will be needed, will be supplied by the Bonneville Unit.

Now that the project has been restructured and over 75 percent of the citizens of Salt Lake County have voted to approve the new repayment contract, the project must resume an aggressive construction schedule in order to meet both current and future water needs. Completion of the project without further delay is vital. The people of Utah have been forced to foot a much larger bill for the project due to past delays. It is now time for this project to be completed on schedule so that the current repayment contract will be sufficient.

The voters of Utah are already paying the price for the actions taken by others in relation to this project, and it would be highly unfair to force the price up yet again by further delays based on unsound and unfounded criticism. Assuming the project can get back on track, water from Jordanelle Reservoir for Salt Lake County will become available by 1994.

I support and endorse completion of the CUP and urge this subcommittee to consider the needs of the people of my district in its consideration of appropriations for this vital project.

Thank you.

Mr. BEVILL. Thank you.

Mr. HILBERT.

I am Robert Hilbert, Chairman of the Board for the Central Utah Conservancy District, which is the legal agency or the sponsor for the Central Utah project. You have heard our three representatives. They have covered the items well. The District has prepared testimony and submitted it for the record.

I also would like to thank the committee for its past support of the project and look forward to the support which is needed to complete the project in the ten-year timeframe that has been mentioned earlier. The mandate, and we consider it a mandate, 73 percent of the voters had voted on that very snowy day in Utah in December, saying "We will accept an additional $385 million debt to complete that project." As all the representatives have indicated, there is a need for that water in each of the three districts and State of Utah, especially where Congressman Watson represents three percent of that county.

The ten-year plan has been worked out with the Bureau of Reclamation and Central Utah District staff. It is an achievable appropriation level sent forward, supported by the Congress. We support the level of funding that is in the President's budget for fiscal year 1987, 84 plus million dollars, and I know it has been a long day, Mr. Chairman, and we will let the record, as submitted to you, stand.

I have with me today our Executive Committee that were very instrumental in getting the support for the repayment contract last November. I would like them to be recognized, if I may. We have the Vice-Chairman of the Board, Mr. Ross Garrett; Mr. Charles Crozier, Gerald K. Maloney, Neil Nielson, and Charles Wilson. Six members, including myself, are the Executive Committee of the 19-person board.

Also with us today is Mr. Don Christiansen, General Manager of the District. He was very instrumental, with his staff, in taking care of the details to secure the favorable vote for our repayment contract.

[The statement of Robert Hilbert follows:]

Testimony for Mr. Robert Hilbert
Chairman, Board of Directors
Central Utah Water Conservancy District
Before the House and Senate Appropriations Committees
April 15, 1986

Mr. Chairman and Committee Members:

I am Robert B. Hilbert, Chairman of the Board for the Central Utah Water Conservancy District, which serves as the legal agency to assist in the development of water resources in 12 Utah counties. Mr. Chairman, thank you for the opportunity to testify today on behalf of the Central Utah Water Conservancy District. Accompanying me today are the Executive Committee members of the Conservancy District Board:

R. Roscoe Garrett, Vice President
Charles Crozier
Gerald K. Maloney
J. Neil Nielson
Charles W. Wilson

Also accompanying us is Don A. Christiansen, General Manager of the District.

Mr. Chairman, we are here today to voice support for the continued funding of the Central Utah Project. The District, by the attached resolution, (Exhibit A) concurs in and supports the President's fiscal year 1987 budget recommendation to the Congress of the United States. As you know, the Bureau of Reclamation has requested $84,246,000 for the Central Utah Project. Of that amount $83.8 million has been requested for the Bonneville Unit. These funds will be used to continue work on Doc's Diversion Dam and Feeder Pipeline, Rhodes Diversion Dam and Win Stream Inlet, Upper Stillwater Dam and Reservoir, Jordanelle Dam and Powerplant, and Duchesne River Area Canal system. The Bureau also plans to award contracts for the relocation of U.S. Highway 40 and 189 at the Jordanelle Reservoir, Alpine Aqueduct Reach Two, and the Syar Tunnel Access Road.

While the funds requested for Fiscal Year 1987 represent an increase of some $22 million over the Fiscal Year 1986 appropriation for the Bonneville Unit, it must be remembered that the Energy and Water Development Appropriations Act of 1986 (P.L. 99-141) contains language that prohibited the expenditure of further funds for the construction of the Bonneville Unit until "a Supplemental Repayment Contract for Municipal and Industrial water supply, sufficient to recover all allocable reimbursable costs plus interest has been executed . . . and such contract has been submitted to the Congress and one hundred days have elapsed." This language prevented any new construction contracts being awarded on the Bonneville Unit until March 21, 1986.

On November 19, 1985 the voters of the State of Utah approved a new Supplemental Repayment Contract (Exhibit B) for CUP. 73% of the voters in the 12 county Central Utah Water Conservancy District favored approval of this contract which was signed by the District and Bureau of Reclamation on November 25, 1985 and submitted to the Congress for the requisite 100 day review period on December 12, 1985.

The new Supplemental Repayment Contract increased the repayment obligation of the Central Utah Water Conservancy District by $368 million. This increase will provide funds to complete construction of the project and pay for Utah's fair share of the Jordanelle Dam and Reservoir as well as to provide for payment of the Strawberry Aqueduct and collections system. These funds will also pay for facilities to bring Central Utah Project water from the Strawberry Reservoir to the Bonneville and Sevier River Basins.

With the approval of this Supplemental Repayment Contract, the repayment plan for the Bonneville Unit now includes four major components:

- The original 1965 repayment contract with a ceiling of $140.4 million;
- The 1985 Supplemental Contract, with a ceiling of $335 million, plus a 10% adjustment for contingencies;
- A $10 million up front contribution from the Central Utah Water Conservancy District; and
- Two separate repayment contracts with the Salt Lake County Water Conservancy District and the Metropolitan Water District of Salt Lake City for the repayment of $42 million of costs associated with the Jordanelle Aqueduct.

Mr. Chairman, the new Supplemental Repayment Contract clearly reflects the mandate of the Congress in the Fiscal Year 1986 Energy and Water development Appropriations Act that it provides complete contract coverage for the District's Municipal and Industrial obligation. Specifically, the Supplemental Repayment Contract obligates the District to repay to the Federal Government "the reimbursable cost, properly allocated under federal reclamation law to municipal and industrial water use for construction of the project."

As you are no doubt aware, the House Committee on Interior and Insular Affairs Subcommittee on Water and Power Resources recently held an oversight hearing on the repayment arrangement on the Bonneville Unit. We believe that the testimony provided by the Department of the Interior as well as our District demonstrated that adequate contract coverage now exists for the anticipated reimbursable cost of building the Bonneville Unit. During this hearing, the Subcommittee received testimony from the General Accounting Office in which the GAO criticized the Bureau of Reclamation's use of the Water Supply Act of 1958 to defer costs associated with future water supplies. However, as was pointed out at the hearing, the use of the Water Supply Act was always envisioned for repayment of the Bonneville Unit M & I component. The original 1965 Repayment Contract specifically recognized that the Water Supply Act could be used, in accordance with its terms, to defer costs under the 1965 contract since it was known at that time that not all of the M & I water would be needed at the initiation of water deliveries.

While we strongly believe that the use of the Water Supply Act was both legal and proper, we also believe that the adoption of the Supplemental Repayment Contract has rendered the entire Water Supply Act issue moot. The Supplemental Repayment Contract, in concert with the other repayment arrangements and the up-front contributions made by the District is more than adequate to cover the cost allocated to M & I Water Supply.

Mr. Chairman, the time has come to move ahead and complete the construction of the Bonneville Unit. This project has been under construction for 20 years with hundreds of millions of dollars being invested. Working with the Department of the Interior, our District has developed a plan that will complete the project by 1995 -- provided that adequate funding is appropriated by the Congress. At this point, it is imperative that we avoid further delays in completion of the project. For every year that the project is delayed beyond the 1995 completion date, at least another $20 million in overhead alone will be added to the project's costs. The project can be completed by 1995 if the Congress will continue appropriations at the level suggested by the Bureau in their budget submissions.

In conclusion, Mr. Chairman, all of us who are associated with the Central Utah Project wish to thank you for the support which you have given to this project over the years. We look forward to working with you in the near future to ensure the timely completion of the Central Utah Project and we wish to thank you in advance for your continued support.

Central Utah Water Conservancy District

P.O. BOX 427 OREM, UTAH 84057 TELEPHONE 226-7100

RESOLUTION

WHEREAS, the President's Fiscal Year 1987 Budget Recommendations to the Congress of the United States included the following request for new funds for the Units of the Central Utah Project:

Unit	Amount
Section 5 (Reimbursable)	
Bonneville Unit	$83,793,000
Upalco Unit	50,000
Jensen Unit	303,000
Uintah Unit	100,000
	$84,246,000
Section 8 (Non Reimbursable)	
Fish, Wildlife & Recreation Bonneville Unit	$ 4,542,000
Total Fiscal 1987 Budget Recommendation	$88,788,000

WHEREAS, these funds provide for an adequate construction and pre-construction program for the Units of the Central Utah Project, and

WHEREAS, the project can be completed by 1995 if Congress will continue appropriations at the level suggested by the Bureau in their budget submissions.

NOW, THEREFORE BE IT RESOLVED, that the Central Utah Water Conservancy District does hereby concur with the recommendations included in the President's Budget and encourages Congress to appropriate the necessary funds, and

BE IT FURTHER RESOLVED, that the Board of Directors of the Central Utah Water Conservancy District encourages all agencies involved in the construction of the project to work diligently to implement the plan jointly developed by this District and Bureau of Reclamation that will complete the project expeditiously, and

BE IT FURTHER RESOLVED, that the Directors of the District request the Governor of the State of Utah and Utah's Congressional Delegation to support and encourage Congress to appropriate the funds as included in the President's Budget, and

BE IT FURTHER RESOLVED, that copies of this Resolution be transmitted to the President, Secretary of Interior, Commissioner of the Bureau of Reclamation, Utah's Governor, Utah's Congressional Delegation, and other interested parties.

CERTIFICATE

I certify that the foregoing is a true and accurate copy of a resolution adopted by the Board of Directors of the Central Utah Water Conservancy District on April 10, 1986.

Don A. Christiansen
Secretary

ELECTION RESULTS

COUNTY	FOR	AGAINST	TOTAL DISTRICTS	DISTRICTS REPORTED	PERCENT REPORTED
Duchesne	1015	941	7	7	100
Garfield	212	174	4	4	100
Juab	882	129	5	5	100
Millard	1466	401	16	16	100
Piute	216	74	5	5	100
Salt Lake	42480	13812	176	176	100
Sanpete	1611	500	16	16	100
Sevier	1849	773	17	17	100
Summit	95	54	1	1	100
Uintah	658	1542	8	8	100
Utah	16498	6090	43	43	100
Wasatch	853	1090	8	8	100
Total	67835	25580	306	306	100

Time: 09:52:41

Percentage of People Who Voted	19%
Total Number of Districts	307
Districts Against	17

Breakdown of Districts Against

Utah
203 (1 District)

Duchesne
222
223 (3 Districts)
224

Garfield
203 (1 District)

Uintah
291
292
293
294 (8 Districts)
295
296
297
298

Wasatch
299
300 (4 Districts)
301
303

Mr. **Bevill**. We are glad to have each of you here and appreciate the fine presentation of your testimony. We will certainly work with you, the delegation here, and hope we can accomplish your goal.

Mr. **Hilbert**. We would appreciate it very much.

Mr. **Myers**. Are the other people here from Utah? Are there others that came besides the six of you identified?

Mr. **Nielson**. Jim Barker.

Mr. **Bevill**. Their names will appear in the record. Thank you very much.

The committee stands adjourned until 9:30 in the morning.

[The following was provided for the record:]

NEW MEXICO INTERSTATE STREAM COMMISSION

COMMISSIONERS

[illegible]
S. E. REYNOLDS, Secretary, Santa Fe
ALBERT E. UTTON, Albuquerque
J. PHELPS WHITE III, Roswell
GEORGE BRANTLEY, Carlsbad
WOODROW O. GARY, Hatch
GROVE BURNETT, Vallecitos
ANN RISHER, Farmington
M. H. SALMON, San Lorenzo
Tracy Seidman, Wagon Mound

BATAAN MEMORIAL BUILDING
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

April 16, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Energy and
Water Development
Committee on Appropriations
U. S. House of Representatives
2362 Rayburn House Office Bldg.
Washington, D. C. 20515

Dear Mr. Chairman:

Transmitted herewith is my statement in support of the appropriation of funds to the Bureau of Reclamation for Fiscal Year 1987 for project investigations and for construction and operation and maintenance of water resource projects authorized to be built by the Bureau of Reclamation. I would appreciate it, very much, if your subcommittee would consider this statement in its deliberations on appropriations to the Bureau of Reclamation for Fiscal Year 1987.

Sincerely,

S. E. Reynolds
S. E. Reynolds
Secretary
by PBM

SER:PBM:bmm

STATEMENT OF S. E. REYNOLDS, SECRETARY NEW MEXICO INTERSTATE STREAM COMMISSION TO THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE OF THE U. S. HOUSE OF REPRESENTATIVES COMMITTEE ON APPROPRIATIONS

April 15, 1986

SUMMARY

This statement is submitted in support of appropriations for the construction and operation and maintenance of water resource projects authorized to be built by the Bureau of Reclamation and in support of appropriations for additional project investigations by the Bureau.

I fully support the President's fiscal year (FY) 1987 budget proposal for water resources projects of the Bureau of Reclamation in New Mexico and other states in which New Mexico has an interest.

STATEMENT

BUREAU OF RECLAMATION

Colorado River Storage Project and Participating Projects

The Colorado River Storage Project Act, which became law in 1956, authorized a carefully planned and farsighted program for the development and use of waters of the Upper Colorado River Basin. To carry this program forward the President has recommended that $123.694 million, including $1.0 million for the Animas-La Plata Project in Colorado and New Mexico, be appropriated to the Bureau of Reclamation for FY 1987. The Animas-La Plata Project, authorized for construction as a participating project in 1968, would provide municipal and industrial water supplies for communities in New Mexico and Colorado, irrigation water supplies for use in both states and settlement of the water rights claims of the two Ute Indian Tribes in Colorado.

I fully support the President's FY 1987 budget proposal for the Colorado River Storage Project and participating projects.

Central Arizona Project

The Colorado River Basin Project Act, Public Law 90-537, enacted in 1968, authorized construction of the Central Arizona Project in Arizona and New Mexico. The President's FY 1987 budget proposes $145.596 million to continue construction of this project. The Hooker Dam and Reservoir unit, or suitable alternative, in southwestern New Mexico is authorized for construction as a unit of the Central Arizona Project. The President's proposed budget includes $822,000 to continue Stage II studies on this unit. I support the President's FY 1987 budget proposal for funding the Central Arizona Project.

Brantley Dam and Reservoir

The President's FY 1987 budget includes $23.65 million for continued construction on the Brantley Dam and Reservoir Project in New Mexico. The primary purpose of this project is to provide flood protection in the vicinity of the City of Carlsbad. Brantley Dam will replace the unsafe McMillan Dam which was reconstructed by the Reclamation Service in 1908, and will provide additional capacity for storage of flood waters. I support the President's FY 1987 budget proposal for this project.

Velarde Community Ditch Project

The President's FY 1987 budget includes $2.28 million to continue construction for replacement of existing and deteriorated diversion facilities and for rehabilitation of deteriorated canal structures. I support the FY 1987 budget proposal for this project.

Colorado River Salinity Control Project, PL 93-320, Title I

The President's FY 1987 budget includes a total of $26.427 million for continued construction of the Yuma Desalting Plant and other salinity control facilities. I support the President's FY 1987 budget proposal for this program.

Colorado River Basin Salinity Control, PL 93-320, Title II and Colorado River Water Quality Improvement Program

The President's FY 1987 budget includes $4.1 million for construction of three salinity alleviation units authorized by Title II of PL 93-320, Grand Valley, Paradox Valley and Las Vegas Wash Units. The President's budget also recommends $800,000 for advanced planning of two additional units that would improve water quality and $3.62 million for general investigations of other potential salinity control programs. I fully support the President's FY 1987 budget proposal for this program.

Closed Basin Division, San Luis Valley Project, Colorado

The President's FY 1987 budget includes $12.594 million for continued construction of the Closed Basin Division. Work will include construction of the Stage 4 canal, land acquisition, cultural resources and additional laterals. The project will facilitate Colorado's delivery of water in the Rio Grande to downstream states and Mexico. I support the President's proposed FY 1987 budget for this project.

General Investigations

The proposed bureau for FY 1987 includes $150,000 for general investigations on the Alamogordo M&I Water Supply Project, Alamogordo, New Mexico. I support the President's FY 1987 budget this general investigation.

Operation and Maintenance Program

I support the President's FY 1987 budget for operation and maintenance for the following Bureau projects in New Mexico and in adjacent states in which New Mexico has an interest; 1) Carlsbad Project, $55,000; 2) Brantley Project, $130,000; 3) Pecos River Basin Water Salvage, $350,000; 4) Rio Grande Project, $3,325,000; 5) Middle Rio Grande Project, $7,839,000; and 6) San Luis Valley Project, $954,000; a total of $12.653 million. I support the President's FY 1987 budget proposal for operation and maintenance of these projects.

The opportunity to present this statement in support of appropriations for the Bureau of Reclamation is sincerely appreciated.

NEW MEXICO INTERSTATE STREAM COMMISSION

COMMISSIONERS

ALVIN M. STOCKTON, Chairman, Raton
S. E. REYNOLDS, Secretary, Santa Fe
ALBERT E. UTTON, Albuquerque
J. PHELPS WHITE III, Roswell
GEORGE BRANTLEY, Carlsbad
WOODROW O. GARY, Hatch
GROVE BURNETT, Vallecitos
ANN RISHER, Farmington
M. H. SALMON, San Lorenzo

BATAAN MEMORIAL BUILDING
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

April 14, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Energy and
  Water Development
Committee on Appropriations
U. S. House of Representatives
2362 Rayburn House Office Bldg.
Washington, D. C.   20515

Dear Mr. Chairman:

Transmitted herewith is my statement in support of the appropriation of funds to the Corps of Engineers for Fiscal Year 1987 for construction of projects, surveys, design and operation and maintenance of Corps projects. I would appreciate it, very much, if your subcommittee would consider this statement in its deliberations on appropriations to the Corps of Engineers for Fiscal Year 1987.

Sincerely,

S. E. Reynolds
Secretary

SER:PBM:bmm

STATEMENT OF S. E. REYNOLDS, SECRETARY
NEW MEXICO INTERSTATE STREAM COMMISSION
TO THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE
OF THE UNITED STATES SENATE COMMITTEE ON APPROPRIATIONS

April 14, 1986

SUMMARY

This statement is submitted in support of appropriations for the construction of water resource projects authorized to be built by the Corps of Engineers.

In general I support the President's fiscal year (FY) 1987 budget proposals. I urge, however, that a line item appropriation be made in the Corps of Engineers budget for Cochiti Dam and Reservoir to designate a total of $176,000 for a feature design memorandum on a drainage system to alleviate high water table conditions on lands of the Cochiti Pueblo caused by seepage under Cochiti Dam. This problem requires immediate attention and New Mexico urges a specific appropriation to provide early relief to Cochiti Pueblo. Attached hereto is a copy of my March 13, 1986 letter to the Governor of the Cochiti Pueblo expressing Governor Anaya's support for the drainage system. Also attached is a copy of the resolution on the Cochiti drainage problem adopted by the Rio Grande Compact Commission at its meeting on March 27, 1986.

STATEMENT

CORPS OF ENGINEERS

Construction

The President's FY 1987 budget includes $2.06 million to modify Jemez Canyon Dam to provide modifications required under the Dam Safety Assurance Program. I support the President's proposed FY 1987 budget for this project.

The President's FY 1987 budget does not include funds to initiate and complete repair of a structural deficiency on the Albuquerque Diversion Channels Project, New Mexico. The project, completed in 1972, has been very effective in controlling arroyo flooding at Albuquerque. A problem has developed at the outfall structures atseveral arroyo inlets to the main diversion channel which must be corrected. I urge that $460,000 be appropriated to the Corps for work needed to correct this structural deficiency.

Surveys

The President's budget includes several surveys in New Mexico; 1) $276,000 to continue the Corps of Engineers' survey

Gila River and Tributaries, Arizona and New Mexico to investigate the feasibility of providing solutions to the many flood problems in that area. 2) $475,000 for the Corps of Engineers survey Rio Grande and Tributaries, Bernalillo to Belen, New Mexico, to continue preparation of the general design memorandum on reconstruction of the levees along the Rio Grande to provide additional flood protection to the adjacent lands which are changing from rural agricutural to urban use; 3) $395,000 to continue the Corps of Engineers survey Pecos River and Tributaries directed at evaluation and the solution of flood problems at Roswell and Carlsbad, New Mexico; and 4) $500,000 to for the Corps survey Rio Grande and Tributaries New Mexico and Colorado directed at a review survey of Abiquiu Reservoir storage. I support the President's budget proposals for these surveys.

Advanced Engineering and Design

The President's FY 1987 budget proposal includes three projects in New Mexico: 1) $300,000 for a general design memorandum on the authorized project to control arroyo flooding of portions of City of Alamogordo, New Mexico; 2) $500,000 for the authorized Rio Grande Floodway-San Acacia Bosque del Apache, New Mexico; and 3) $200,000 for the authorized Rio Grande Floodway-Truth or Consequences Unit, New Mexico. I fully support the President's proposed budget for the three projects.

Operation and Maintenance Program

The President's FY 1987 budget proposes $1.063 million for Abiquiu Dam, New Mexico. An additional $399,000 could be effectively used to remodel the project operations building, update the electrical system in the building and install automatic power switching. I urge an appropriation of $1.462 million for Abiquiu Dam operation and maintenance.

The President's FY 1987 budget proposes $1.273 million for Cochiti Lake, New Mexico. I urge that $176,000 of this amount be designated for the design and construction of a drainage system to alleviate high water table conditions on lands of the Cochiti Pueblo caused by seepage under Cochiti Dam. Governor Anaya has directed the Interstate Stream Commission to support Federal appropriations for this much needed work to rectify the drainage problem. Also, an additional $100,000 could effectively be used to improve deficient recreational facilities at Cochiti Lake. I urge an appropriation of $1,373 million for operation and maintenance at Cochiti Lake with $176,000 designated as requested above.

The President's FY 1987 budget proposes $1.201 million for Conchas Lake, New Mexico. An additional $324,000 could be effectively used to replace a waterborne restroom facility and to pave an existing gravel surfaced service road. I urge an appropriation of $1.525 million for Conchas Lake.

The President's FY 1987 budget proposes $233,000 for Jemez Canyon Dam, New Mexico. An additional $62,000 is needed to replace the existing access bridge to Santa Ana Pueblo. I urge an appropriation of $295,000 for Jemez Canyon Dam.

The President's FY 1987 budget includes three additional Corps projects in New Mexico: 1) Galisteo Dam, $141,000; 2) Santa Rosa Dam and Lake, $516,000 and 3) Two Rivers Dam, $242,000. I support the President's budget for operation and maintenance at these three projects.

The opportunity to present this statement in support of appropriations for these Federal agencies is sincerely appreciated.

NEW MEXICO INTERSTATE STREAM COMMISSION

COMMISSIONERS

ALVIN M. STOCKTON, Chairman, Raton
S. E. REYNOLDS, Secretary, Santa Fe
ALBERT E. UTTON, Albuquerque
J. PHELPS WHITE III, Roswell
GEORGE BRANTLEY, Carlsbad
WOODROW O. GARY, Hatch
GROVE BURNETT, Vallecitos
ANN RISHER, Farmington
M. H. SALMON, San Lorenzo

BATAAN MEMORIAL BUILDING
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

March 13, 1986

The Honorable Sam Arquero
Governor, Cochiti Pueblo
P. O. Box 70
Cochiti Pueblo, New Mexico 87041

Dear Governor Arquero:

Please be advised that Governor Toney Anaya has directed the Interstate Stream Commission to support federal legislation making appropriations for the design and construction of a system of subdrains to rectify the drainage problem on lands of the Cochiti Pueblo caused by seepage under Cochiti Dam.

Sincerely,

S. E. Reynolds
Secretary

SER:pt

cc: Col. David E. Peixotto

RESOLUTION

In Support of Appropriations for Drainage Works at Cochiti Pueblo

WHEREAS, seepage of water under Cochiti Dam has caused a high water table creating a drainage problem on lands of the Cochiti Pueblo adjacent to Cochiti Dam, and

WHEREAS, the Corps of Engineers has been able to complete installation of an underground drainage system to relieve the high water table conditions on only about seventeen acres of irrigated lands of the Cochiti Pueblo.

NOW, THEREFORE, BE IT RESOLVED, that the Rio Grande Compact Commission supports federal legislation making appropriations for the design and construction of a system to rectify the drainage problem on lands of the Cochiti Pueblo caused by seepage under Cochiti Dam.

BE IT FURTHER RESOLVED, that the Secretary of the Rio Grande Compact Commission is hereby directed to furnish copies of this resolution to the Governors and the Congressional delegations of the States of Colorado, New Mexico and Texas and to the District Engineer, Albuquerque District, Corps of Engineers.

STATE OF TEXAS
RIO GRANDE COMPACT COMMISSION
EL PASO

JESSE B. GILMER
COMMISSIONER

April 10, 1986

Ms. Lori Whipp
House Committee on Appropriations
Sub-Committee on Energy and Water Development
Room 2262 Rayburn House Office Building
Washington, D.C. 20515

Dear Ms. Whipp:

I have been advised that during March of this year the Sub-Committee on Energy and Water Development of the House Committee on Appropriations conducted hearings on all or a portion of the request of the Corps of Engineers, which among other things pertained to Cochiti Dam and Reservoir on the Rio Grande River in New Mexico.

I have been told that the Corps has recommended an appropriation of $176,000 under operations and maintenance for the construction of a drainage system below Cochiti Dam, to remedy serious damage to lands owned by the Cochiti Pueblo Indian Tribe at Cochiti, New Mexico.

I have been informed that the record of these hearings are still open through April 15, 1986 for additional testimony.

If the above is correct I wish to recommend and support the position of the Corps of Engineers for obtaining an appropriation to study and remedy the drainage problem which is being encountered below Cochiti Dam.

Recently I committed to the Governor of the Cochiti Tribal Council and Tribe, that I would recommend to the Congress that the Corps of Engineers be authorized, financed, and directed to proceed to remedy seepage problems and any problems caused by seepage, damaging lands belonging to the tribe below the dam.

I would hope that the legislation and authorization also includes some method of land rehabilitation involving the lands already damaged.

I am sending you this written request, which may not be as appropriately presented as it should be, but I am sending it in order to have it

P.O. BOX 4065 79913 5812 CROMO DRIVE SUITE 105 AREA CODE 915, OFFICE 581-1161, RESIDENCE 584-6738

appear as part of the record for consideration by the Sub-Committee during the course of its normal business.

I thank you very much if you are able to place this letter in the hearing records of the Sub-Committee.

The flood waters impounded in Cochiti Reservoir, New Mexico, consist of waters of the Upper Rio Grande drainage basin. This is critical to the safety of Elephant Butte Reservoir, New Mexico, which is the point of delivery by the State of New Mexico to Texas under the Rio Grande Compact. I feel that in 1985 and 1986 the storage of Rio Grande waters for flood control in Cochiti by the Corps of Engineers prevented uncontrolled spill from Elephant Butte Reservoir, which would have certainly resulted in considerable loss of life and great damage to property.

I might add as a citizen of the southwestern United States, that the operation of Cochiti Dam and Reservoir by the Corps is of critical significance in protecting the city of Albuquerque, New Mexico from devasting flooding.

Thank you and the Sub-Committee very much for any favorable action which can be taken on the Corps request in behalf of Cochiti Dam and Reservoir and the Cochiti Indian Pueblo of New Mexico.

Sincerely yours,

JESSE B. GILMER

JBG/tlt

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECT

WITNESS

HON. ROBERT J. LAGOMARSINO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **BEVILL.** The hearing will come to order.

We are pleased to have our good friends and colleagues here, the California Delegation, as well as you good people from the State of California.

We will start right off here, and we will take the members first, as they come in. I know these members need to get to their own committee meetings, so, we will accommodate them and move right into the Commission next, and then Bob, we will recognize you.

Our first witness is Mr. Lagomarsino. Your full statements will be made a part of the record.

Mr. **LAGOMARSINO.** Thank you, Mr. Chairman.

I want to once again thank you for all of your assistance in the past, and commend you for your foresight, because many of the projects you have previously approved in my District were responsible for saving life and property from this winter's storms.

I won't take much of your time. There are witnesses from my District who will go into detail later. I am here to support the following requests for appropriations, all of which enjoy the support of my District and are crucial to the future protection and development of the area.

In alphabetical order, they are for the U.S. Corps of Engineers, the Channel Islands Harbor dredging, $3,250,000; the Coast of California Storm and Tidal Wave Study, $1.5 million; Goleta Streams AE&D Studies, $200,000; Mission Creek planning and engineering studies, $200,000; Port Hueneme dredging, $1,020,000; Port San Luis design study, $500,000—that is critically needed to prevent damage in the area—Santa Barbara County Storm Protection Study, completion of reconnaissance study, $149,000; Santa Barbara Harbor restart feasibility study, $220,000—that harbor is closed off much of the time, and it is also essential if we are going to do anything about beach erosion, to do something about that harbor—Santa Barbara Harbor dredging, $800,000; Ventura Harbor reconnaissance study, $175,000; and Ventura Harbor dredging, $1,690,000.

In addition, Mr. Chairman, I want to endorse the request of the Bureau of Reclamation for a small reclamation projects loan to the United Water Conservation District for the Freeman Diversion Project.

Last year, your committee generously earmarked $2.5 million for this project, but unfortunately, the Senate did not agree, and I would ask that a similar amount be provided for fiscal year 1987.

An environmental impact study is completed now, and that might bring a different result in the Senate.

I would also request that this project be considered for funding under the existing authorization ceiling should funds become available, in order to avoid further delay in this very important and ongoing project.

In summary, Mr. Chairman, we thank you for your past courtesies and consideration, and pledge our support for your efforts to develop and protect our Nation's infrastructure and resources for the benefit of all our citizens.

Mr. BEVILL. Thank you, Bob. We appreciate your fine statement.

[The statement of Mr. Lagomarsino follows:]

Testimony of
Hon. Robert J. Lagomarsino
before
House Appropriations Committee
Subcommittee on Energy and Water Development
Hon. Tom Bevill, Chairman
April 16, 1986

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, I COME BEFORE YOU ONCE AGAIN TO EXPRESS OUR THANKS FOR YOUR ASSISTANCE IN THE PAST AND COMMEND YOUR FORESIGHT, WHICH WAS DEMONSTRATED ONCE AGAIN THIS PAST WINTER WHEN PROJECTS CONSTRUCTED UNDER YOUR GUIDANCE PREVENTED LOSS OF LIFE AND PROPERTY IN OUR AREA. I HOPE IT IS AS GRATIFYING TO YOU AS IT IS TO US TO SEE THE FRUITS OF YOUR LABOR SO DRAMATICALLY DEMONSTRATED TIME AFTER TIME.

I WILL NOT TAKE MUCH OF YOUR TIME. THERE ARE WITNESSES WHO WILL FOLLOW ME LATER TODAY WHO WILL SUBMIT DETAILS ON THE PROJECTS IN OUR AREA. BASICALLY, I'M HERE TO SUPPORT THE FOLLOWING REQUESTS FOR APPROPRIATIONS, ALL OF WHICH ENJOY THE SUPPORT OF MY DISTRICT AND ARE CRUCIAL TO THE FUTURE PROTECTION AND DEVELOPMENT OF THE AREA. IN ALPHABETICAL ORDER, THEY ARE (FOR THE U.S. ARMY CORPS OF EMGINEERS):

CHANNEL ISLANDS HARBOR DREDGING: $3,250,000
COAST OF CALIFORNIA STORM AND TIDAL WAVE STUDY: $1,500,000
GOLETA STREAMS AE&D STUDIES: $200,000
MISSION CREEK PLANNING AND ENGINEERING STUDIES: $200,000
PORT HUENEME DREDGING: $1,020,000
PORT SAN LUIS DESIGN STUDY: $500,000
SANTA BARBARA COUNTY STORM PROTECTION STUDY,
    COMPLETION OF RECONNAISSANCE STUDY: $149,000
SANTA BARBARA HARBOR RESTART FEASIBILITY STUDY: $220,000 ②
SANTA BARBARA HARBOR DREDGING: $800,000
VENTURA HARBOR RECONNAISSANCE STUDY: $175,000
VENTURA HARBOR DREDGING: $1,690,000

IN ADDITION, MR. CHAIRMAN, I WANT TO ENDORSE THE REQUEST OF THE BUREAU OF RECLAMATION FOR A SMALL RECLAMATION PROJECTS LOAN TO THE UNITED WATER CONSERVATION DISTRICT FOR THE

FREEMAN DIVERSION PROJECT. YOUR COMMITTEE LAST YEAR GENEROUSLY EARMARKED $2.5 MILLION FOR THIS PROJECT, BUT UNFORTUNATELY, THE SENATE DID NOT AGREE, AND I WOULD ASK THAT A SIMILAR AMOUNT BE PROVIDED FOR FY 87. I WOULD ALSO REQUEST THAT THIS PROJECT BE CONSIDERED FOR FUNDING UNDER THE EXISTING AUTHORIZATION CEILING SHOULD FUNDS BECOME AVAILABLE, IN ORDER TO AVOID FURTHER DELAY IN THIS IMPORTANT PROJECT.

IN SUMMARY, MR. CHAIRMAN, WE THANK YOU FOR YOUR PAST COURTESIES AND CONSIDERATION, AND PLEDGE OUR SUPPORT FOR YOUR EFFORTS TO DEVELOP AND PROTECT OUR NATION'S INFRASTRUCTURE AND RESOURCES FOR THE BENEFIT OF ALL OUR CITIZENS.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. ALFRED A. McCANDLESS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. McCANDLESS. Mr. Chairman, thank you for giving me the opportunity to appear before you today, and allowing me to voice my support for six water projects of great importance to California's Thirty-Seventh District.

I would like to briefly introduce several representatives from my District who will be appearing before you later to discuss these projects in greater detail.

Supervisor Walt Abraham, Chairman of the Riverside County Flood Control District, will be appearing on behalf of the Lake Elsinore Stabilization Project, the Santa Ana Mainstem, and funding for the Santa Ana River and Orange County Survey final report.

Charles Bryant, President of the Board of Directors for the Elsinore Valley Municipal Water District, will also be speaking on the Water District's behalf in favor of the project at Lake Elsinore.

Andrew Schlange will be representing the Santa Ana Watershed Project Authority; Stanley Mills is here for the Rancho California Water District; and Doyle Boen will be testifying for the Eastern Municipal Water District.

In addition, Kenneth Edwards, Chief Engineer for the Riverside County Flood Control District, and James Laughlin, General Manager of the Elsinore Valley Municipal Water District will be available to answer your questions.

Each of these gentlemen has appeared before your committee in the past, and all support the continued funding of the projects mentioned above, projects which are vital to the future of Riverside County.

I urge your careful consideration of their requests. Mr. Chairman, I would like to again thank you and the members of the subcommittee for allowing me to appear this morning, and ask permission to insert the rest of my statement in the record.

[The statement of Mr. McCandless follows:]

TESTIMONY OF THE HONORABLE AL McCANDLESS
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS

APRIL 16, 1986

Mr. Chairman, thank you for giving me this opportunity to appear before you today, and allowing me to voice my support for six water projects of great importance to California's 37th District.

I would like to briefly introduce several representatives from my district who will be appearing before you later to discuss these projects in greater detail. Supervisor Walt Abraham, Chairman of the Riverside County Flood Control District, will be appearing on behalf of the Lake Elsinore Stabilization Project, the Santa Ana Mainstem, and funding for the Santa Ana River and Orange County Survey final report. Charles Bryant, President of the Board of Directors for the Elsinore Valley Municipal Water District, will also be speaking on the Water District's behalf in favor of the project at Lake Elsinore.

Andrew Schlange, will be representing the Santa Ana Watershed Project Authority, Stanley Mills is here for the Rancho California Water District, and Doyle Boen will be testifying for the Eastern Municipal Water District. In addition, Kenneth Edwards, Chief Engineer for the Riverside County Flood Control District, and James Laughlin, General Manager of the Elsinore Valley Municipal Water District will be available to answer your questions.

Each of these gentlemen has appeared before your committee in the past, and all support the continued funding of the projects mentioned above. Projects which are vital to the future of Riverside County.

LAKE ELSINORE -

Mr. Chairman, Elsinore is a lake with a history of extremes. Periods of drought are followed by times of intense flooding, and the region suffers accordingly. In 1980 alone, flood damage to the areas surrounding Lake Elsinore reached over $30 million - and we can expect more of the same unless action is taken quickly to prevent it. The Lake Elsinore Project provides the action needed. It is a well-designed program to stabilize the Lake through a combination of flood and drought control. The $1 million which the Bureau of Reclamation has recommended for its appropriation in FY 1987 would be money well-spent, and I ask the Subcommittee to include it in this year's legislation.

SANTA ANA MAINSTEM -

The Santa Ana River flows through three heavily populated counties in Southern California - Riverside, San Bernardino, and Orange Counties - and poses a flood threat to over 2 million people. Studies conducted by the US Army Corps of Engineers have shown that in the case of a major flood, damages could exceed $12 billion in 15 major cities. In light of these facts, the $3.5 million requested by the Corps of Engineers for the Santa Ana Mainstem seems almost a bargain. I urge your support for this vital project.

SANTA ANA WATERSHED PROJECT -

Mr. Chairman, when the Central Arizona Project becomes fully operational, Southern California's entitlement to Colorado River Water will be reduced by 55%. The Santa Ana Watershed Project will assure the continued viability of our region by providing conveyance facilities to transport water from the Box Springs Feeder to local users. The $8.7 million requested for Fiscal 1987 will be used to complete construction on the gravity pipeline, storage reservoir, and a pumping station which are essential to this plan. The construction scheduled for 1987 will put us within spitting distance of water self-sufficiency in Southern California - a goal we can all embrace, and I urge your approval of this funding.

RANCHO CALIFORNIA -

The Rancho California Water District's small reclamation project is one of benefit to all of southern Riverside County. This small rec project will provide tremendous water storage and production capacity. It will consist of 38 additional wells to recover stored water and 24 more miles of large diameter water lines to allow 260,000 acre-feet of base water to be withdrawn. It will also provide storage for up to 100,000 acre-feet of water - a boon for our entire region. I ask for your inclusion of this important project.

EASTERN MUNICIPAL WATER DISTRICT -

The $1.7 million requested for Fiscal Year 1987 funding for the Eastern Municipal Water District will be used to continue construction on a series of pipelines, pumping plants, and connectors to link the Water District with Lake Skinner and the Perris Reservoir. This project will reduce the depletion of stored ground water and allow current methods of water treatment to be brought into conformity with federal standards. I support this project, and am pleased that its continuation has been included in the Bureau's recommendations.

STUDY OF THE SANTA ANA RIVER BASIN AND ORANGE COUNTY -

The initial survey report on the Santa Ana River Basin has been completed, and several projects are now underway. This does not mean, however, that our task is entirely complete. Alternatives to some of the current proposals need to be developed and refined. The money we are seeking for this study would accomplish just that, and I urge your support for the full amount requested.

Mr. Chairman, I would like to again thank you and the Members of the Subcommittee for allowing me to appear this morning, and for your consideration of the projects I have mentioned above.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. MEL LEVINE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BEVILL. Next, we have Congressman Levine.

Mr. LEVINE. I also very much appreciate the opportunity to appear before you today on behalf of the community of Redondo Beach, California.

I would like to begin by expressing my appreciation and the appreciation of Redondo Beach to you and the subcommittee members for your past support in providing the necessary funds for the Army Corps of Engineers to conduct an analysis to determine whether the 14-foot high end of the Redondo Beach breakwater should be raised to the 22-foot height of its northern end.

The existing north breakwater is often overtopped by waves, and wave surge through the breakwater also contributes to hazardous navigation conditions and damage to harbor facilities.

The severe storms which, as you know, struck the California coast in 1978 and 1983 resulted in extensive damage to King Harbor, a major facility located at the southern end of the Santa Monica Bay in Redondo Beach.

The storm waves and flooding caused extensive public and private property damage, resulting in huge losses.

I am pleased to be able to report to you today that the Corps has made significant progress in conducting its study. Problem analysis has begun and a public meeting to solicit comments and suggestions has been held. Initial reconnaissance studies were completed in September of 1984, and the feasibility study has been initiated.

Mr. Chairman, if funds are appropriated for fiscal year 1987 in the amount of $200,000, the Corps expects to be able to complete this study. Because the Administration has included no funding for the study in its current budget proposal, I am here today to emphasize the urgent need for those funds.

The breakwater, as it currently stands, only offers limited and inadequate protection. I cannot stress enough the critical importance of providing the Army Corps with the necessary funding to complete its study uninterrupted so that future storm and wave damage to public and private property can be prevented.

Again, Mr. Chairman, thank you for allowing me to testify before you and the members of your subcommittee today on this crucial issue.

Mr. BEVILL. Very good, Mel. Thank you.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. LEON E. PANETTA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **BEVILL.** Next, we recognize Congressman Panetta.

Mr. **PANETTA.** I am going to keep this very brief, because I have a subcommittee to chair in a few minutes.

Mr. Chairman, members of the subcommittee, again, on behalf of Norm Mineta and myself, we express our continuing support for the San Felipe Project that you have provided year in and year out.

We have an appropriation of $10.6 million that is included in the President's budget, to allow for the continued construction.

We are almost through with the project and need these remaining funds to complete it, and it will begin to serve the communities of San Bernardino County and also San Jose, and provide significant relief both to the farmers in that area and those that live in the area.

It is a tribute to the subcommittee for the work that has been done, and the support you provided for this project, and I urge you to continue to help us on that issue.

We have had significant flood damage this year in the Santa Cruz mountain area. There is the Gold Gulch community. There is a project on both of the sides of the authorization bill, we are asking for $250,000 so the Corps can, in effect, proceed with their study to get their project off the ground.

So I am asking for $250,000 for a preliminary study, and design of the various project options, and we have funding for that project on both sides. It has been approved by both the House and the Senate.

Again, a problem area that I have mentioned in the past. You provided some help on the Morro Bay Harbor. This is a harbor that was designed, and I think involves some serious problems in terms of the harbor entrance.

We have had a number of lives lost in the last 22 years, 18 lives have been lost in the Morro Bay Harbor, and it has been tied to their entrance. Seven have been lost since 1980.

As a matter of fact, in 1983, a vessel carrying 32 school children overturned at the entrance of Morro Bay Harbor, and fortunately, all 32 children were rescued. It is a dangerous harbor entrance, and we are asking for at least a study that has to be conducted to try to see if that harbor can either be redesigned or improved, to try to provide greater protection to those that make use of it.

Those are the issues that I wanted to bring to your attention. Thank you.

[The statement of Mr. Panetta follows:]

TESTIMONY OF THE HONORABLE
LEON E. PANETTA
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE
ON ENERGY AND WATER DEVELOPMENT

APRIL 16, 1986

Mr. Chairman: I appreciate having the opportunity to come before you to present testimony on behalf of water and harbor projects of interest to my constituents in the 16th Congressional District of California. The 16th District includes all of Monterey and San Benito Counties, and portions of Santa Cruz and San Luis Obispo Counties.

Let me take this opportunity to thank the Chairman and members of the Subcommittee for their consideration and support for projects in my area in the past. Today, I am submitting testimony before the Subcommittee to request a continuation of your support for projects in Fiscal Year 1987. Let me discuss these projects with you.

SAN FELIPE DIVISION OF THE CENTRAL VALLEY PROJECT & SAN BENITO COUNTY WATER CONSERVATION AND FLOOD CONTROL DISTRICT

I am urging the Subcommittee to approve an appropriation of $10,642,000 in Bureau of Reclamation construction program funds for the continued construction of the San Felipe Division of the Central Valley Project. This project is nearing completion, and when operational, the San Felipe Division project will provide cash flow and begin payback to the federal government.

I am also urging the Subcommittee to approve an appropriation of $365,000 in Bureau of Reclamation loan program funds for the San Benito County Water Conservation and Flood Control District. This project provides for a water distribution system to bring water from the San Felipe project to water-short areas for agricultural, municipal, and industrial uses.

The water conveyed by this project is critical to maintaining existing farmland in the agricultural heart of California, and is not intended to bring new lands into production. Land subsidence will be curtailed or perhaps eliminated by replenishing underground water storage through percolation of San Felipe water into stream beds. The Subcommittee has supported this project in the past. I thank the Subcommittee, and urge your support and assistance in Fiscal Year 1987.

GOLD GULCH LEVEE

The omnibus water resources bill pending in Conference Committee authorizes the construction of a project for the control of destructive floodwaters in the Gold Gulch community in Santa Cruz County. The severe storms this year have once again caused extensive flood damage in the Gold Gulch vicinity. This area has suffered significant flood damage year after year, causing a direct threat to homes immediately adjacent to the river bank and necessitating the evacuation of area residents.

The Corps of Engineers has worked closely with county officials and local residents in seeking to minimize flood damage. But, a permanent flood control project is vitally need. Accordingly, the water resources legislation authorizes construction of a project for the prevention of flood damage in the Gold Gulch community at an estimated cost of $6 million. I request that the Subcommittee appropriate $250,000 in Fiscal Year 1987 for the Army Corps of Engineers to conduct a preliminary study and design of project options. The sooner a permanent solution can be put in place, the less the danger to the lives and property of area residents.

SAN LORENZO FLOOD CONTROL

The omnibus water resources bill also authorizes $3.5 million to prepare engineering plans and initiate action to improve the San Lorenzo River flood control project. The existing project was constructed by the Army Corps of Engineers in 1959 following the large-scale flooding in the downtown area during the winter of 1955. The project was designed with two miles of river levees and the river bottom was dredged to seven feet below sea level. As originally designed, it was anticipated that only a minimum amount of annual dredging would be required to maintain the river bed at its new level. Unfortunately, nature did not cooperate, and the river bed shortly refilled to its original level.

To respond to this problem, the Corps commissioned a study in 1981. However, severe flooding in 1982 raised severe questions about the validity of the study results. The flood indicated that during high flows the waters tends to scour the river bottom and increase its capacities. To answer the question raised by the 1982 floods, Congress authorized the Corps to initiate another study which addressed the scour issue and other changes which have occurred over the last twenty years.

In a letter to me of February 14, 1986, the Corps concluded that "under present conditions, should a flood of a frequency larger than a 35-year event occur, the city would sustain serious damage, with possible loss of life".

The 1955 flood - which is considered a 35-year event - resulted in the death of five individuals, displaced 2,400 persons, and caused over $39 million worth of damage in today's dollars. If a flood of this magnitude were to hit the City today, damage estimates have been approximated at $70-$90 million.

In addition, flood plain restrictions now in effect in downtown Santa Cruz severly limit future development and require the payment of substantial flood insurance premiums by local residents.

The omnibus water resources bill authorizes funds to allow the Corps to correct the problems that the original project did not resolve to provide the City with needed flood protection. Current conditions along this river pose a serious public safety hazard and are stressing the economic vitality of Santa Cruz. I would therefore urge the Subcommittee to include $3.5 million for flood protection measures along the San Lorenzo River in FY87.

MORRO BAY HARBOR ENTRANCE RECONFIGURATION

I am also requesting the Subcommittee to approve an appropriation of $280,000 for the Army Corps of Engineers to conduct a reconnaisance-level study of the configuration of the breakwaters at the entrance to Morro Bay Harbor. This study would investigate changes in the configuration of the breakwaters at the entrance to Morro Bay Harbor to address the hazardous conditions at the Harbor entrance. Funding for this study was authorized in a House Public Works Resolution on June 19, 1963. The Corps has an approved capability of $280,000 and needs appropriations in FY87 to tap this capability.

The Morro Bay Harbor entrance was designed to serve as a base of naval operations during World War II. Design and construction of the breakwaters was hurriedly accomplished in 1942-43. Since that time, storm waves have repeatedly damaged the north breakwater and major rehabilitarion projects were performed by the U.S. Army Corps of Engineers in 1964 and 1984/85.

The entrance to Morro Bay Harbor has long been recognized by mariners on the California coast as one of the most dangerous in existence. In the last 22 years, there have been 18 lives lost in Morro Bay Harbor related to the entrance. Seven of these have occurred since 1980 - indicating that the entrance has changed over the years.

Wave and swell conditions at the Harbor entrance caused extreme hazards for 150 commercial fishing boats who use Morro Bay as a home port and for 200 other visiting fishing vessels. The community of Morro Bay relies on the commercial fishing business.

In 1985, the Coast Guard issued warnings that the Harbor was unsafe for navigation. This resulted in a loss of commercial fishing for 36 days.

A condition report on the entrance to Morro Bay Harbor was prepared by the U.S. Army Corps of Engineers in 1976. This report concludes that the present configuration at the entrance of Morro Bay Harbor creates problems for boats entering and leaving the harbor due to hazardous wave and swell conditions created at the breakwater entrance.

The report indicates that additional harbor protection is required. A study is needed so that full testing of appropriate oceanographic factors to determine the best solution for reducing hazardous conditions in the entrance channel as well as reducing the amount of shoaling in the navigation channel can be conducted. I am therefore requesting the Subcommittee to appropriate $280,000 to fund a reconnaissance-level study for reconfiguration of the Morro Bay Harbor entrance in FY87.

MORRO BAY HARBOR PORT OFFICE

The omnibus water resources also authorizes the construction of a new harbor office at Morro Bay. The construction of this office is projected to cost $250,000 and I urge the Subcommittee to appropriate these funds for this project in FY87.

Morro Bay Harbor entrance has a long history of accidents and fatalities. Since 1970 there have been approximately nine deaths in Morro Bay Harbor related to the entrance. Reports of fatalities only tell part of the story. For example, on February 8, 1986, ten vessels required City Harbor Patrol assistance at the entrance. In 1983, the charter vessel "San Mateo", with 32 school children aboard, overturned at the entrance of Morro Bay Harbor. All 32 children were rescued, but the skipper of the vessel was fatally injured in the accident.

Morro Bay Harbor's safety problem is compounded by the fact that although it is the only port of refuge on California's Central Coast, the view of the harbor entrance from its harbor office is obstructed, and the harbor patrol officers have only a two to three minute time span in which vessels approaching the harbor entrance can be seen. The new office would provide an obstructed view of the harbor mouth, much of the inner basin, and the sandpit where most survivors of boating accidents wash ashore. The U.S. Coast Guard, California Dept. of Fish and Game have expressed an interest in sharing space at the new facility. I would urge the Subcommittee to include $250,000 for construction of the new harbor office in its fiscal year 1987 budget.

Again, Mr. Chairman, I would like to thank you and the Subcommittee members for this opportunity to testify, and for your consideration and assistance in meeting the needs of my district's residents.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. NORMAN D. SHUMWAY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BEVILL. Next, we will hear our good friend and colleague, Congressman Shumway.

Mr. SHUMWAY. Thank you, Mr. Chairman. It is a pleasure to be back before the subcommittee. I appreciate your assistance so many times in the past, and look forward to it again this year.

Water development has been very important for all of us in California. In many ways it has raised the key to California's success, growth and prosperity, and in that regard, the Federal Government has played a partnership role with State, local water districts in the construction and maintenance of various water systems and facilities.

And I would commend the committee for the role it has played in that regard over the years.

My District, the Fourteenth, embraces much of the State's Central Valley, the Mother Lode area, the Sierra-Nevada mountains, and is part of the State in which much of the Central Valley project has its origins, and much of the water generated by that project is used within the boundaries of my District; therefore, as you know it is a key District as far as water interests are concerned.

Here from my District are representatives from San Joaquin County, the Port of Stockton, and they will be supplying some of the details later.

Briefly, Mr. Chairman, I would like to address a couple of projects within the Army Corps of Engineers' budget, and the Bureau of Reclamation budget.

The dam portion of the New Melones Lake project was completed some years ago, and now we have a continuing responsibility to provide recreational and wildlife facilities there, and we are requesting $1.9 million for those purposes, and I would hope the committee will act favorably on that.

Secondly, within the Corps of Engineers' budget is the completion of the deepending project from the Port of Stockton out to the San Francisco Bay, a project which has been underway for some years.

This budget request should be the final installment. The Corps will be dredging the 35 feet, and I am very happy to join the President, and the California Water Commission and others in requesting the $3.9 million needed to complete this project.

We also have had in the Delta a considerable problem in past years with the presence of water hyacinth. The Corps has been instrumental in eliminating that weed, and it will take continued monitoring. I am asking the subcommittee to continue to apply an effort in that regard.

The recent rains we have had in California pointed out once again the need that we have to get on with building the Auburn

Dam. The existing cofferdam which had been built some years ago, is presently washed out.

There will be great cost to the Bureau of Reclamation to replace that structure, and therefore at this time, we don't know the full extent of the damage and how much will be entailed to restore the cofferdam, but it seems to me, Mr. Chairman, that before long, we are going to have to face the issue of either building the Auburn Dam as we commended it in the past, or deauthorizing it as a project.

I think there is a need for the Auburn Dam flood protection and for other reasons, and hope we will be able to get funding for that worthwhile project.

The Delta, which is in my District, is always in need of support studies, support efforts, maintenance, and repair of levee systems; and as before, we are asking for sums of money to be earmarked for those studies, and to be earmarked for the overall management of the Delta. It is a very key resource, not only to northern California, but southern California as well.

Mr. Bevill. Thank you.

[The statement of Mr. Shumway follows:]

STATEMENT BY THE HONORABLE NORMAN D. SHUMWAY (R.-CA.) BEFORE THE HOUSE COMMITTEE ON APPROPRIATIONS' SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT: APRIL 16, 1986.

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE, I AM PLEASED TO HAVE THIS OPPORTUNITY TO COME BEFORE YOU TODAY TO TESTIFY ON BEHALF OF THOSE WATER-RELATED PROJECTS WHICH ARE OF EXTREME IMPORTANCE TO CALIFORNIA'S 14TH CONGRESSIONAL DISTRICT, WHICH I REPRESENT, AND TO THE STATE OF CALIFORNIA IN GENERAL.

AS THE MEMBERS OF THE SUBCOMMITTEE WELL KNOW, PROGRESSIVE YET RESPONSIBLE WATER DEVELOPMENT HAS, IN MANY WAYS, ALLOWED FOR CALIFORNIA'S SUCCESS, GROWTH, AND PROSPERITY. IN AN EFFORT TO CONTINUE THESE SUCCESSFUL POLICIES, LOCAL, STATE, AND FEDERAL GOVERNMENTS, AS WELL AS THE VARIOUS NON-GOVERNMENTAL BENEFICIARIES OF WATER DEVELOPMENT, MUST REMAIN ACTIVE IN MOVING FORWARD AS PARTNERS IN THE CONSTRUCTION AND MAINTENANCE OF THOSE WATER STORAGE, CONVEYANCE, AND FLOOD CONTROL SYSTEMS WHICH ARE TRULY NEEDED. I WOULD LIKE TO COMMEND THIS COMMITTEE FOR THE VALUABLE ROLE IT PLAYS IN ADVANCING THESE GOALS.

MR. CHAIRMAN, THE 14TH CONGRESSIONAL DISTRICT OF CALIFORNIA INCLUDES PORTIONS OF OUR STATE'S CENTRAL VALLEY, MOTHER LODE COUNTRY, AND SIERRA-NEVADA MOUNTAINS. A SUBSTANTIAL AMOUNT OF OUR STATE'S FEDERALLY-DISTRIBUTED CENTRAL VALLEY PROJECT WATER-YIELD BOTH ORIGINATES AND IS DELIVERED WITHIN THIS DIVERSE

REGION. AS A RESULT, MANY OF THE PROJECTS WHICH I AM SUPPORTING TODAY NOT ONLY AFFECT MY DISTRICT BUT ALSO MANY IMPORTANT INTERESTS THROUGHOUT THE ENTIRE STATE.

AS WELL, I WOULD LIKE TO MENTION THAT THE 14TH DISTRICT INCLUDES AN IMPRESSIVE AGRICULTURAL INDUSTRY WHICH IS ESSENTIAL TO LOCAL ECONOMIES AND CONSUMERS NATIONWIDE. NEEDLESS TO SAY, THIS AGRICULTURAL INDUSTRY IS DEPENDENT UPON AN ADEQUATE SUPPLY OF WATER, AND CORRESPONDINGLY ADEQUATE WATER FACILITIES, FOR ITS LIVELIHOOD.

IN COMING BEFORE YOU TODAY, I AM PLEASED TO SUPPORT, IN LARGE PART, THE PRESIDENT'S FY '87 BUDGET REQUESTS FOR THE WATER PROJECTS CONTAINED WITHIN THE ARMY CORPS OF ENGINEERS AND THE BUREAU OF RECLAMATION. THE PROPOSALS WHICH I AM ADVOCATING ARE BOTH RESPONSIBLE AND ESSENTIAL FOR THE NEEDED WATER DEVELOPMENT WITHIN MY CONGRESSIONAL DISTRICT FOR THE FISCAL YEAR 1987. THEY ARE:

ARMY CORPS OF ENGINEERS

1. NEW MELONES LAKE -- $1.9 MILLION

WITH THIS APPROPRIATION, THE CORPS WILL BE ABLE TO CONTINUE WITH THE CONSTRUCTION OF RECREATIONAL AND WILDLIFE FACILITIES NEEDED TO MAXIMIZE THIS PROJECT'S CAPABILITIES. I, THEREFORE, SUPPORT THE PRESIDENT'S FY '87 REQUEST FOR THIS PROGRAM.

2. SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL PROJECT -- $3.9 MILLION

THE FY '87 BUDGET REQUEST FOR THIS PARTICULAR PROJECT INCLUDES $1 MILLION IN FUNDING TO COMPLETE THE DEEPENING OF THE STOCKTON CHANNEL TO 35 FEET. IN DOING SO, THE PORT OF STOCKTON WILL BE ABLE TO HANDLE MUCH LARGER SHIPS WITH OVER TWICE THE CARRYING CAPACITY THAN THEY ARE ABLE TO HANDLE NOW. THIS PROJECT WILL ELIMINATE THE NECESSITY FOR "TOPPING OFF" FACILITIES AT SAN FRANCISCO AND OTHER PORTS.

The funding proposal also includes $260,000 to initiate and complete the Donlon Fish and Wildlife facilities; $400,000 to initiate wavewash bank protection; $380,000 for Roberts' Island Recreational facilities; $1.47 million for engineering and design; and $390,000 for supervision and maintenance. I, therefore, join the President, the California Water Commission, and the City of Stockton in requesting $3.9 million for FY '87 to enable expedient completion of this needed project.

3. Aquatic Plant Control --

This program researches and helps control the growth and spread of the water hyacinth -- a plant which has, in the past, literally immobilized vast reaches of the San Joaquin/Sacramento Delta. Substantial success in controlling this waterway blockage has been realized through this program. I understand that no single line item for the Sacramento/San Joaquin Delta is included under the Corps' FY '87 budget for Aquatic Plant Control; instead, there is a single $8 million request for all of the Corps' work, nationwide, in this area. I, therefore, would request that whatever monies are needed to continue this program in the Delta be made available out of this more general line item request.

4. Sacramento/San Joaquin Delta Survey Study -- $250,000

This flood damage prevention study will examine the needs and federal interest in providing improvements for flood control, recreation, fish and wildlife protection, and water quality as related to salinity intrusion due to levee failure and other water management problems in the Delta.

As you know, Mr. Chairman, the Delta is a fragile and critical water system made up of 11,000 miles of leveed water channels and extremely fertile islands. Since 1900 there have been over 100 levee failures, with 40 occurring since 1930. As the Federal, State and local governments continue to look at plans which will increase the usage of these waterways as a route to transport water, no doubt the need for greater protection for this area will increase. Moreover, the recent flooding disaster in the area illustrated dramatically this need for greater protection. I very strongly support an FY '87 appropriation request, consistent with the Administration, of $250,000.

5. Lower San Joaquin River & Tributaries Clearing & Snagging -- $1.5 million

This important project consists of $500,000 to complete the clearing and snagging on the 150 miles of the San Joaquin River between Stockton and the Friant Dam; $140,000 for engineering and design; and $70,000 for supervision and administration. This $1.5 million request is consistent with the Administration's FY '87 request.

6. OPERATION AND MAINTENANCE

I SUPPORT THE FY '87 ARMY CORPS OF ENGINEERS BUDGET REQUEST MADE BY THE PRESIDENT FOR OPERATION AND MAINTENANCE FOR THE FOLLOWING LIST OF PROJECTS:

A. FARMINGTON DAM
B. NEW HOGAN LAKE
C. NEW MELONES LAKE
D. SAN FRANCISCO BAY - DELTA MODEL STRUCTURE
E. SAN JOAQUIN RIVER

BUREAU OF RECLAMATION

1. AUBURN-FOLSOM SOUTH UNIT --

THE AUBURN DAM REQUEST MADE BY THE PRESIDENT FOR THIS YEAR IS THE PROJECTED DOLLAR AMOUNT REQUIRED TO MAINTAIN CURRENT BUREAU OPERATIONS IN THE AUBURN AREA. HOWEVER, THIS REQUEST WAS CALCULATED PRIOR TO THE RECENT FLOODING DISASTER WHICH WIPED OUT THE EXISTING COFFER DAM AND HIGHWAY 49 AT THE AUBURN DAMSITE. THE DAMAGE, AND COST TO REPAIR IT, IS STILL BEING ESTIMATED. I, THEREFORE, REQUEST THE APPROPRIATION OF WHATEVER SUMS ARE DETERMINED TO BE NECESSARY TO RESTORE THE COFFER DAM TO THE EXTENT NEEDED, TO SUITABLY RESTORE HIGHWAY 49, AND TAKE CARE OF THE OTHER PROBLEMS WHICH RESULTED FROM THE RECENT FLOOD.

AS YOU KNOW, THE CONSTRUCTION OF THIS PROJECT HAS BEEN DELAYED OVER THE YEARS FOR VARIOUS REASONS. AS A CONSEQUENCE OF THESE DELAYS, THE ESTIMATED COST OF CONSTRUCTION FOR THE PROJECT HAS EXCEEDED THE LIMITATION SET IN THE ORIGINAL 1965 AUTHORIZATION. TO REMEDY THIS SITUATION, I HAVE INTRODUCED LEGISLATION, H.R. 1226, WHICH WOULD AUTHORIZE THE SECRETARY OF THE INTERIOR TO ENTER INTO COST SHARING AGREEMENTS WITH NON-FEDERAL ENTITIES TO MAKE UP FOR THIS FUNDING SHORTFALL, AND ALSO TO REAUTHORIZE THE PROJECT AT CURRENT COST ESTIMATES.

I WOULD LIKE TO POINT OUT THAT H.R. 1226 ADDRESSES AND, IN MY MIND, BASICALLY RESOLVES THE QUESTION OF COMPLETION AND OPERATION OF THE AUBURN DAM PROJECT ON THE LOWER AMERICAN RIVER SEGMENT. THIS LEGISLATION GUARANTEES MINIMUM FLOW LEVELS WHICH WILL ALLOW FOR PRESENT DAY RECREATIONAL AND FISHERIES CAPACITIES IN THE RIVER TO BE MAINTAINED FOREVER. UNTIL THIS LEGISLATION IS ENACTED, HOWEVER, THE PRESIDENT HAS REQUESTED MONIES TO KEEP THE AUBURN DAM FACILITIES OPEN AND THE VARIOUS STUDIES ON SCHEDULE. AGAIN, I ADDITIONALLY AND STRONGLY REQUEST WHATEVER FUNDING IS NEEDED TO ADEQUATELY RESTORE THE AREA.

2. DELTA SUPPORT STUDIES -- $1,008,000

I AM PLEASED TO BE ABLE TO SUPPORT THE PRESIDENT'S REQUEST OF SLIGHTLY MORE THAN $1 MILLION FOR THIS PROJECT. THIS FUNDING WILL ALLOW FOR NEEDED STUDIES TO EXAMINE THE SACRAMENTO/SAN JOAQUIN DELTA, INCLUDING THE SUISUN MARSH.

3. DELTA WATER MANAGEMENT PROGRAM -- $400,000

THIS $400,000 REQUEST, CONSISTENT WITH THE CALIFORNIA WATER COMMISSION'S REQUEST, IS FOR THE BUREAU TO REPROGRAM EXISTING FUNDS SO THAT THEY MIGHT PARTICIPATE AS PARTNERS WITH THE ARMY CORPS AND THE STATE DEPARTMENT OF WATER RESOURCES IN THE SACRAMENTO/SAN JOAQUIN DELTA SURVEY STUDIES. THESE STUDIES, AS EXPLAINED ABOVE IN THE ARMY CORPS SECTION, EXAMINE THE FEDERAL NEEDS AND INTEREST IN PROVIDING IMPROVEMENTS FOR FLOOD CONTROL, RECREATION, FISH AND WILDLIFE, AND WATER QUALITY AS RELATED TO SALINITY INTRUSION DUE TO LEVEE FAILURES AND OTHER WATER MANAGEMENT PROBLEMS IN THE DELTA.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. NORMAN Y. MINETA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BEVILL. Next we have Congressman Mineta. We are glad to hear from you, Norm.

Mr. MINETA. As always, Mr. Chairman, I am delighted to appear this morning on behalf of Santa Clara County.

I want to thank you, Mr. Chairman, for your leadership over the years, as we have worked together to advance our national program of energy and water development projects.

Please allow me to mention several of the projects in my area that are an integral part of that national effort. Later today Mr. Henly, Mr. O'Halloran, Mayor Hughan and Mr. Esau will appear before you to speak about these projects in more detail, but I would like to quickly mention these important priorities.

As you know from your own observation, Mr. Chairman, as well as our colleague, Mr. Myers, we have a serious flooding problem in the heart of San Jose, and study work is underway for a comprehensive solution to that problem which will not only provide flood protection, but also form the basis for an ambitious locally-funded redevelopment of a major part of San Jose.

I know that you and your staff are familiar with this project, and have seen how important it is to us.

We are also seeking funds for the Uvas-Carnadero Creek project on the Pajaro River, and for the next increment of funding on the San Francisco Bay Shoreline study.

And finally, Mr. Chairman, we have a request to finish the San Felipe Division of the Central Valley Project. This will fulfill a dream that many of us have had for years, and I am sure Mr. Henly will tell you about the details of the project with great clarity and enthusiasm.

Mr. Chairman, every item we are seeking is included in the President's budget at the level we are seeking. These are reasonable and prudent projects, which even in this difficult fiscal environment stack up favorably against any standard of cost-effectiveness.

Mr. BEVILL. How did you do that?

Mr. MINETA. No smoke and not a lot of mirrors, Mr. Chairman.

So again, Mr. Chairman, let me thank you and the subcommittee for the opportunity to testify today on behalf of these vitally needed projects.

Thank you very much.

Mr. BEVILL. Thank you.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. WILLIAM M. THOMAS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BEVILL. Next, our good friend, Congressman Bill Thomas.

Mr. THOMAS. Thank you very much, Mr. Chairman. I ask that my full testimony be placed in the record.

I would point out four particular projects in my District, which runs from the Pacific Ocean to the Nevada border, and encompasses coastline, coast mountains, Central Valley and Sierra-Nevada.

On Caliente Creek feasibility study, and we have the support of the Board of Supervisors from Kern County, the local people decided to pay 50 percent of that program committed in February of 1985.

The agreement calls for $400,000 annual expenditure.

The Corps has said they are only going to fund it at $120,000, and we believe we need to live up to our commitment of $200,000 on both sides, so that the $400,000 annual expenditure can be met.

If we do not, we will fall behind. If the locals are willing to put up 50 percent, we have to focus on the Corps putting up 50 percent as well.

I have the testimony of the Kern County Water Agency.

[The information follows:]

TESTIMONY

of

Fred L. Starrh, President
Kern County Water Agency
Bakersfield, California

In support of appropriations to continue Corps of Engineers'
Caliente Creek flood control feasibility study
before the
U.S. House of Representatives Committee on Appropriations,
Subcommittee on Energy and Water Development

April 16, 1986

Honorable Tom Bevill, Subcommittee Chairman

Dear Mr. Chairman and Members of this Subcommittee:

I am Fred L. Starrh, president of the board of directors of the Kern County Water Agency in Bakersfield, California. The Agency's interest today is Fiscal Year 1986-87 funding to continue the Corps of Engineers' Caliente Creek flood control feasibility study. The President's Budget proposes an allocation of $120,000. We seek to increase this amount to $200,000, consistent with the cost-sharing agreement that has been implemented between the Kern County Water Agency and the Corps of Engineers.

This agreement is the first in the nation to be implemented for feasibility studies. Completed in February, 1985, and implemented March 15 of this year, the agreement calls for equal contributions from the Corps and the Agency of $200,000 to meet total projected expenses of $400,000 annually over the three-year study period. Under the agreement, at least half, or $100,000, of the Agency's share must be in cash, and up to half of the sharemay be made in in-kind services.

The feasibility study is currently in its second year. Work completed during the current 85-86 fiscal year will provide for a draft report scheduled to be completed in June, 1987. The FY 86-87 funds we are seeking will be used to produce the final draft of the feasibility report, which is scheduled to be completed by February, 1988, and to begin construction design work.

The unified and strong support among local interests for this project is exemplary. We were among the first in the nation to sign a cost-sharing agreement for any kind of feasibility study, and, as I mentioned earlier, this agreement is the first in the nation to be actually implemented.

We deeply appreciate the support you and this subcommittee have given to the Caliente Creek project over the last few years. The Caliente flooding problem is serious, and local interests have committed time and money to achieve a solution as soon as possible so that damages such as those that were incurred during the historic floods of 1983 and 1978 will not have to be experienced again. Damages from both those floods together totaled more than $36 million.

We urge your continued support for the Caliente project and the cost-sharing agreement, and hope that you will support our request to allocate $200,000 in the FY 86-87 budget for the feasibility study. If funding for the study is reduced at this point as suggested in the President's Budget, the study will not be able to completed on schedule, and the total project costs will be increased for both the federal government and local interests.

-30-

Mr. THOMAS. Twelve years ago, the subcommittee made $600,000 available in a study for the Port San Luis Breakwater. Of that money, only $150,000 has been spent. $450,000 has been appropriated, and the Corps has recently completed a study that shows that better than 50 percent of the activity is commercial.

So, it is a fully justified program, but they have not spent the money, and one of the things I want to do is urge this committee that funds already for the study should be used.

On the Antelope Valley flood control study, involving Edwards Air Force Base, the Corps has decided they will close out the community study. I would urge this subcommittee to take a look at redirecting those funds to examine a control flooding program for Edwards Air Force Base.

It needs periodic flooding to level the dry lake, but as you will recall, when we diverted the space shuttle flight from Edwards to White Sands, New Mexico, that was almost $3 million expended in that one program.

It doesn't make much sense to allow nature to determine when that lake should be flooded. If we put a project in there, it would be beneficial on a controlled release of water across Edwards Air Force Base in a timely fashion.

I would continue to support the San Joaquin Valley conveyance study. It is extremely important, and since I have co-sponsored legislation to authorize the Mid-Valley Canal, I hope funds can be made available so we can continue to try to solve this overdraft problem for California's farmers, and I thank the chairman very much.

[The statement of Mr. Thomas follows:]

The Hon. William M. Thomas
Subcommittee on Energy and Water Development
House Committee on Appropriations
April 16, 1986

Mr. Chairman, I appreciate this opportunity to discuss flood control and other Corps of Engineers funding matters affecting my Congressional District. Briefly, I would suggest the following adjustments in the appropriations for the Corps of Engineers' Sacramento and Los Angeles Districts and for the Bureau of Reclamation:

1. Caliente Creek feasibility study, Sacramento District, Corps of Engineers: provide FY '87 funding of $200,000, an increase of $80,000 over the Corps' $120,000 recommendation.

2. Port San Luis breakwater, Los Angeles District, Corps of Engineers: ensure that funds continue to be available for the completion of the feasibility study.

3. Antelope Valley flood control study, Los Angeles District, Corps of Engineers: urge the Corps of Engineers to use all unexpended 1986 Antelope Valley Drainage Study funds to focus on the benefits to Edwards Air Force Base.

4. San Joaquin Valley Conveyance Study, Bureau of Reclamation: provide $500,000 for a continuation of coordinated studies being conducted by the Bureau of Reclamation, the State of California and the Mid-Valley Water Authority.

I want to more fully describe the reasons for these recommendations.

Caliente Creek feasibility study

Caliente Creek lies in California's Kern County. It has a history of serious flooding. Significant floods have occurred in 1932, 1943, 1944, 1945, 1966, 1969, 1978 and most recently in 1983. Lives have been lost as a result of uncontrolled flooding and the 1978 and 1983 floods caused $11 million and $20 million respectively in damage to farms, businesses and residential property.

A Corps of Engineers reconnaissance level study points out how useful flood control would be. The study indicated that a $50 million flood control project, involving a 20,000 acre foot detention dam, would have a 1.1 to 1 benefit to cost ratio. Such estimates of the proposed project's value have made local project sponsors, including the Kern County Water Agency, extremely interested in continuing with the program.

The Caliente Creek study is also distinct because it is the nation's first cost-sharing project. Local project sponsors agreed on a 50/50 division of costs in February 1985. That agreement, intended to result in a full feasibility report in February 1988, calls for a $400,000 annual expenditure on this project. In other words, local sponsors and the Corps obligated themselves to spend $200,000 each every year from 1985 to 1987.

Unless the full $200,000 of the Corps' share is available, this feasibility study will fall behind schedule. At least a year to two years' extra work will be required to complete the study, putting the project behind schedule and raising the cost of the study by as much as $200,000. I urge the Subcommittee to make the full $200,000 amount available.

I want to note that this request is strongly supported by the Kern County Water Agency and other local project sponsors. A copy of the Kern County Water Agency's comments on this funding request is attached to my testimony, and I respectfully request that the Agency's statement be included in the record.

Port San Luis Breakwater

Two years ago, this subcommittee made $600,000 available to the Los Angeles District of the Corps of Engineers to complete a feasibility study on repairs to a breakwater at Port San Luis in San Luis Obispo County. Some $450,000 in funding still remains from that appropriation, pending completion of a benefit analysis. The Los Angeles District has recently completed estimates on the benefits that I understand are now under review within the Corps. As over 50% of the benefits come from commercial activity to be associated with the breakwater, this breakwater's redevelopment is clearly attractive by Corps of Engineers' standards.

I understand the Corps has considered delaying further funding of the study until future fiscal years. This approach will only put the study further behind in the process of being completed. As funds are already available for the study, we should avoid reprogramming them in favor of future funding programs. I hope the Subcommittee will urge the Corps to release the remaining $450,000 as soon as possible so the Corps' reevaluation study can be completed.

Antelope Valley flood control study, Los Angeles District

Last year, this subcommittee made $260,000 available to the Los Angeles District of the Corps of Engineers to complete a drainage study of the Antelope Valley Flood Plain. The Corps has limited its study to only two floodplains in the Valley--Armagosa and Anaverde. I understand the Corps now intends to use the remaining funds to close out this study with a recommendation that no further action be taken.

I believe it would be a more appropriate use of federal funds to look at flooding on Edwards Air Force Base and to pursue a Corps study with the objective of justifying federal expenditures to construct flood control facilities that mutually benefit the Base and the upstream communities.

A significant amount of rainfall runoff from Antelope Valley eventually ends up on Edwards' Rosamond and Rogers Dry Lakes. After major storms, many weeks are sometimes required for storm runoff to evaporate from the Lakes, resulting in lengthy and expensive delays in the Air Force's flight test programs and affecting Space Shuttle recovery. For instance, the cost last year of diverting a single Shuttle flight from Edwards to White Sands, New Mexico was $2.75 million. Costs of flight test delays can be as much as $85,000 per day.

I ask that the Committee urge the U.S. Army Corps of Engineers use all unexpended 1986 Antelope Valley Drainage Study funds to focus on the benefits to Edwards Air Force Base. (In addition, I request the Committee ensure that FY86 appropriation of $260,000 be allocated by the Corps for this study and that the funds not be diverted to other projects without the Committee's knowledge and approval.)

San Joaquin Valley Conveyance Study

The Bureau of Reclamation is preparing a study on the financial feasibility and environmental concerns of the routing for additional water distribution facilities that would bring additional Central Valley Project water into the overdrafted San

Joaquin Valley. The California Water Commission recommends that $500,000 be appropriated to continue this on-going study during FY 1987, provided that funds can be reprogrammed from Bureau functions. In view of the severe overdrafting of groundwater in the San Joaquin Valley, I support that request. This request is consistent with legislation I have cosponsored to authorize the Mid-Valley Canal, and I hope funds can be made available so that progress can continue toward helping California farmers solve their groundwater problems.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. RICHARD H. LEHMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **BEVILL.** Congressman Lehman.

Mr. **LEHMAN.** Thank you for the cooperation you have given me and my constituents over the past few years. We are heavily dependent on this committee out there in my District.

I want to thank you for the assistance you have given the Port of Stockton and what I know will be continuing support for deepening that channel, Fancher Creek-Redbank Project in the Fresno area, and the support you have given the New Melones to complete the recreation facilities there.

The request is $1.9, and I am asking an additional $3.5 million be spent there on recreation facilities, and to fix a road that was destroyed during the recent flooding.

In addition to that, I would like to get such money as is necessary to implement the law enforcement arrangement there between the Bureau and local law enforcement agencies. This is a problem at New Melones, in my District, and at Lake Berryessa in Mr. Bosco's District.

We want to make sure we have adequate law enforcement to fund the contract.

The main item I want to address is the San Joaquin Valley Conveyance Study. The Bureau of Reclamation is presently conducting an investigation which examines the potential for delivering an average annual water supply of approximately 500,000 acre-feet from the Sacramento-San Joaquin Delta to the east side of the San Joaquin Valley.

This six-county area supports a highly productive and diversified farm economy and contributes heavily to California's $15 billion statewide farm economy.

Unfortunately, irrigated agriculture in the region has been, and continues to be, quite dependent on overdrafting of the ground water aquifer, with developed surface and imported water supplies insufficient to meet farm needs.

We don't have any developed surface water coming in at this time.

Ground water overdrafting presently approaches approximately 1.5 million acre-feet, and is anticipated to exceed 2 million acre-feet within the next generation.

Farmers in the area already employ highly sophisticated irrigation-conservation technologies, yet continue to face increased water pumping costs.

Without additional imported water deliveries to relieve the ground water overdrafting, the economic stability of the region will be further threatened.

The Bureau's San Joaquin Valley conveyance study is being conducted—which this committee has funded and been very cooperative—in cooperation with the State of California and the local Mid-

Valley Water Authority, and will examine the alternatives for developing an integrated water delivery system to meet the overdraft needs of the region.

Cognizant of the need to address other related issues, the Bureau's study will also examine drainage and fish and wildlife concerns.

The study is being conducted under the East Side Division authorization. Legislation to authorize the construction of a project based on the findings of the investigation has been introduced in both Houses, H.R. 3182 and S. 1898.

Though it is not included in the Bureau's initial fiscal year 1987 budget request, I would like to request that the committee direct the Bureau to appropriate $500,000 in fiscal year 1987 to continue the San Joaquin Valley conveyance investigation.

Additional design studies need to be done to determine the best alternative for this facility and continuation of this study is an integral part of the Bureau's efforts to identify the water development capabilities of the San Joaquin Valley area.

This request has the support of the Mid-Valley Water Authority and the California Water Commission, and I look forward to working with the committee on this issue.

Thank you.

[The statement of Mr. Lehman follows:]

CONGRESSMAN RICHARD H. LEHMAN
18TH DISTRICT -- CALIFORNIA
STATEMENT BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE
ON
ENERGY AND WATER DEVELOPMENT
APRIL 16, 1986
9:30 A.M.

Mr. Chairman and Members of the Subcommittee:

In the interest of time, I would like to limit my remarks to several specific items and submit the remainder of my testimony for the record.

SAN JOAQUIN VALLEY CONVEYANCE STUDY

The Bureau of Reclamation is presently conducting an investigation which examines the potential for delivering an average annual water supply of approximately 550,000 acre-feet from the Sacramento-San Joaquin Delta to the eastside of the San Joaquin Valley. This six-county area supports a highly productive and diversified farm economy and contributes heavily to California's $15 billion statewide farm economy.

Unfortunately, irrigated agriculture in the region has been and continues to be quite dependent on overdrafting of the groundwater acquifer, with developed surface and imported water supplies insufficient to meet farm needs. ① Groundwater overdrafting presently approaches approximately 1.5 million acre-feet and is anticipated to exceed 2 million acre-feet within the next generation. Farmers in the area already employ highly sophisticated irrigation-conservation technologies, yet continue to face increased water pumping costs. Without additional imported water deliveries to relieve the groundwater overdrafting, the economic stability of the region will be further threatened.

The ② Bureau's San Joaquin Valley Conveyance Study is being conducted in cooperation with the State of California and the local Mid-Valley Water Authority, and will examine the alternatives for developing an integrated water delivery system to meet the overdraft needs of the region. Cognizant of the need to address other related issues, the Bureau's study will also examine drainage and fish and wildlife concerns. The study is being conducted under the East Side Division authorization (Public Law 89-561). Legislation to authorize the construction of a project based on the findings of the investigation has been introduced in both Houses, H.R. 3182 (Lehman) and S. 1898 (Wilson).

Though not included in the Bureau's initial FY '87 budget request, I would like to request that the Committeee direct the Bureau to appropriate $500,000 for Fiscal Year 1987 to continue the San Joaquin Valley Conveyance Investigation. Additional design studies need to be done to determine the best alternative for this facility and continuation of this study is an integral part of the Bureau's efforts to identify the water development capabilities of the San Joaquin Valley area.

This request has the support of the Mid-Valley Water Authority and the California Water Commission and I look forward to working with the Committee on this issue.

REDBANK-FANCHER CREEKS

The Redbank-Fancher Creeks Flood Control Project has a long history here in Washington. It has been almost thirty years since this Fresno County flood control project was first conceived and the need for such a project has been identified in eight different local and federal investigations. The project has the unanimous support of the local communities and the project is included in both H.R. 6 and S. 1567, omnibus water legislation which awaits conference committee consideration and final congressional approval.

I join my congressional colleagues from the area and the local sponsors in supporting the Army Corps of Engineers Fiscal Year 1987 Budget request for $2 million for construction of the project.

The Redbank-Fancher Creeks Flood Control Project is a much-needed and long-awaited for project that would provide vital flood protection for the Fresno-Clovis Metropolitan area. I urge the Appropriations Committee to continue its support for the project and ultimately join Congress in finally securing its authorization later this year.

NEW MELONES RECREATION AND LAW ENFORCEMENT

Once again, I return to the Subcommittee to seek additional funds for the funding of recreation facilities at New Melones Reservoir located in Tuolumne and Calaveras Counties.

As I have indicated in previous testimony before the Subcommittee, New Melones Lake has been the victim of the Administration's retroactively applied recreation cost-sharing policy. While the Administration provided funds for "minimal" recreation development at New Melones, those funds were hardly adequate to meet the real demands on resources nor the very clear responsibility of the Federal government to develop recreation resources at New Melones as required by law.

In response, three years ago I formed a local four-county task force to prioritize the recreation development needs of the New Melones Lake and Stanislaus River region. That task force recommended a three-year, $18.4 million plan, reflecting a $30 million reduction in the initially proposed New Melones Lake Master Plan.

While the three-year construction timetable recommended by the local task force has obviously not been met due to federal budget constraints, this Subcommittee has acknowledged the responsibility of the Federal government in this regard and has supported additional funding requests which have totaled $4.5 million over the past two fiscal years. ($1.5 million was added to the Corps FY '85 budget of $4.5 million for a total of $6.0 million and $3 million was added to the Corps FY '86 reguest of $1.2 million for a total of $4.2 million.)

Recognizing the fiscal constraints imposed by the federal deficit and Gramm-Rudman-Hollings, the local task force has recommended that the Corps of Engineers budget for the 1987 Fiscal

Year be increased by $3.5 million for recreation construction at New Melones Lake and on the Stanislaus River. This would be in addition to the $1.9 million requested by the Corps for other nonrecreation development construction in the area.

I appreciate the support which the Subcommittee has provided in the past and look forward to continuing to work with its members and staff to fashion a reasonable and equitable solution to this issue.

Finally, in a related matter I would like to lend my support to the Bureau's efforts to provide such sums as necessary to meet the obligations provided for by Public Law 98-552, which authorizes the Bureau to enter into cooperative agreements with local law enforcements agencies for services at federal water resource developments. Under this authority the Bureau entered into cooperative agreements with both Tuolumne and Calaveras Counties at New Melones. I would support assurances that the Bureau would be able to continue should funding arrangements at New Melones and other similar resource developments, such as Lake Berryessa in Napa County, for Fiscal Year 1987.

Mr. Chairman that concludes the oral portion of my testimony and I would like to submit the remainder of my testimony for the record. I appreciate having this opportunity and look forward to working with the Committee and its staff on any specific details.

ARMY CORPS OF ENGINEERS

NEW MELONES LAKE -- The President's Budget recommends $1.9 million for nonrecreation construction. Pursuant to the recommendation of the New Melones local advisory task force, I recommend that the Corps budget be increased by $3.5 million for recreation construction on the reservoir and downstream along the Stanislaus River bringing the total FY '87 request to $5.4 million.

REDBANK-FANCHER CREEKS -- The President's Budget includes $2 million for construction, contingent upon authorization. The project is included in both H.R. 6 and S. 1567, omnibus water legislation awaiting conference committee consideration. The project has a 1.6 to 1.0 benefit to cost ratio and has unanimous local support. I support the appropriations request.

LOWER SAN JOAQUIN RIVER & TRIBUTARIES -- The President's Budget has recommended $1.5 million be spent on channel clearing and snagging on the San Joaquin River from the Merced River downstream to the Sacramento-San Joaquin Delta. While this work poses some very serious environmental concerns, I support funding for this work contingent upon the implementation of appropriate mitigation efforts. Allowing full channel capacity will relieve much of the strain on adjacent properties, decrease erosion, and minimize flood potential.

In addition, under this same authority I encourage the Corps to pursue efforts to perform similar work on the upper San Joaquin River between Friant Dam and Gravelly Ford in Fresno and Madera Counties. An equally serious channel problem exists on this portion of the San Joaquin River and I urge the Corps to take necessary steps to rectify this problem as well.

SAN FRANCISCO TO STOCKTON SHIP CHANNEL -- The President's Budget includes $3.9 million for the completion of the deep channel and other related features. The Port of Stockton and the local communities are in support of increasing the FY '87 appropriations by $1.1 million for a total of $5.0 million to help expedite the completion of this important navigation project. I join the local sponsors in supporting the increase and urge the Committee to increase the Corps budget accordingly.

SACRAMENTO-SAN JOAQUIN DELTA STUDIES -- The President's Budget recommends $250,000 for continued studies on determining Federal interest in providing improvements in flood control, recreation, fish and wildlife, and other concerns. The Delta encompasses 700,000 acres in a five-county area and is a pivotal geographic location for much of Northern California's water. I support these studies.

OPERATION AND MAINTENANCE -- I support the following Army Corps of Engineer Operation and Maintenance budget requests:

Buchanan Dam-Eastman Lake, Madera	$1,350,000
Farmington Dam, Madera	$ 117,000
Hidden Dam-Hensley Lake, Madera	$1,368,000
New Hogan Lake, Calaveras	$1,145,000
New Melones Lake, Calaveras-Tuolumne	$ 593,000
Pine Flat Lake, Fresno	$1,795,000
San Joaquin River	$2,013,000

BUREAU OF RECLAMATION

SAN JOAQUIN CONVEYANCE INVESTIGATION -- Though the President's Budget includes no funds for this line item, I would like to request that the Appropriations Committee allocate sums up to $500,000, and if necessary reprogram such funds from existing Bureau of Reclamation budget, for advance planning and preliminary engineering design. Legislation has been introduced (HR 3182 and S 1898) to authorize the construction of this project and additional funding is necessary for the continued development of this important project.

OFF STREAM STORAGE -- The President's Budget recommends $350,000 for continued studies of additional off stream storage potential to meet the water needs of the State. These studies, along with the San Joaquin Conveyance Investigation, are important in the orderly development of California's water needs and I support these funds.

DELTA WATER MANAGEMENT PROGRAM -- I am joining the California Water Commission in supporting the appropriation of $400,000 to allow the Bureau of Reclamation to participate with the State of California, Corps of Engineers, and others in facilitating the implementation of the Coordinated Operations Agreement, H.R. 3113 currently pending before Congress. The agreement is vital to the orderly operation of the State and Federal water systems and these funds are important in the ongoing programs in the Sacramento-San Joaquin Delta. If necessary, these funds should be reprogrammed from existing Bureau activities.

AUBURN-FOLSOM SOUTH UNIT -- The President's Budget contains $1 million for ongoing contracts and maintenance of facilities. The cost of the project is still under review by the Federal-state Task Force and a recommendation is forthcoming. Construction of the Folsom South Canal would help relieve the serious groundwater overdraft problem in eastern San Joaquin County and and I support the continued appropriations of these funds.

DELTA SUPPORT STUDIES -- The President's Budget includes $1,008,000 for continuing these studies: including $372,000 for Miscellaneous Project Programs; $408,000 for Operations and Maintenance; and $228,000 for Planning. These studies are important in analyzing and understanding the important role of the Delta in California's overall water development scheme and I support the inclusion of these funds.

SAN LUIS UNIT, CVP -- The President's Budget recommends $12,172,000 for the fiscal year for continuing the San Luis Drainage Investigations and other related projects, and I support the budget request. These funds are vital to the continued work on the cleanup of Kesterson Reservoir and the agricultural drain problems in Westlands Water District.

OAKDALE IRRIGATION DISTRICT (San Joaquin and Stanislaus) -- The President's Budget includes $4,100,000 for continuation of the rehabilitation of the delivery and conveyance system serving the district's lands. I support the budget request.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. RON PACKARD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **PACKARD**. Thank you, Mr. Chairman. I appreciate the opportunity to appear before your subcommittee on behalf of Orange and San Diego Counties in California.

In the Orange County portion of my District, I am seeking your support for a $3.5 million appropriation for the Santa Ana River Mainsteam project. This request is supported by the Administration and by all of the local officials of all three counties that this project impacts.

This amount would allow the continued planning and engineering as the Corps awaits authorization of the construction.

I request appropriate language instructing the Corps to use these funds to complete Phase II, General Design Memorandum, which includes the Upper Santa Ana Canyon Dam Unit, being substituted for Mentone Dam.

Finally, concerning this project, I would like to thank the subcommittee for last year's language regarding water conservation at Prado Dam and urge inclusion of the same or similar language in this year's bill.

While I am here today, I would like to clear up some misunderstandings about my involvement in the San Luis Rey Flood Control Project.

Property in which I used to own a partial interest lies along the river. I no longer own that land, although my brothers and I hold the deed of trust on the property, which is not scheduled to pay out for three more years.

I have received legal counsel that there is still a potential conflict of interest. Having said that, I would simply like the subcommittee to pay special attention to Mayor Larry Bagley of Oceanside, California, who will testify here later this morning.

The Mayor and other city officials certainly have the community interest in mind as they support the San Luis Rey Flood Control Project.

Again, thank you, Mr. Chairman, and members of your subcommittee, for your diligent efforts to look after the important interests of my District and all of California.

Mr. **BEVILL**. Thank you, Ron.

WEDNESDAY, APRIL 16, 1986

CALIFORNIA PROJECTS

WITNESS

HON. ROBERT E. BADHAM, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **BADHAM.** Thank you, Mr. Chairman.

Like the others, it is a pleasure to be here in front of this committee. You have given us much help in the past, and we look forward to your help in the future.

I would like to mention a few water projects that have to do with my District in southern California.

First of all, along with my colleagues from southern California and local representatives from the Orange County area, who you will hear from later today, I would like to express my support for the full $3.5 million funding level that the Administration has recommended for continued engineering and planning studies for flood control along the Santa Ana River.

George Osborne will testify in more detail, of course.

It is well recognized that the Santa Ana River poses the worst potential flood threat in the Western United States. Without further flood control improvements along the Santa Ana River, future floods could have a devastating impact on this area in terms of thousands of lives lost and billions of dollars in property damage.

It has been nearly 10 years since an omnibus water resource bill has been authorized by Congress. This year, however, both the House and Senate have approved authorizing legislation in the forms of H.R. 6 and S. 1567, respectively.

Since the Santa Ana River Project has been included in both these bills, it is likely that the Corps of Engineers will be able to keep the project on schedule for completion of the Phase II General Design Memorandum in 1988 and begin construction in 1989, provided that this request for $3.5 million is approved.

In addition, I believe that it is very important that the $550,000 funding, as requested in the President's budget, be provided for the Interim Report III which involves the West Orange County Flood Channels—Talbert, Coyote Creek, East Garden Grove, Wintersburg Huntington Beach and Greenvill-Banning—of the Santa Ana River Project.

These funds are necessary so that the leveed channels which overflowed in March 1983, causing $3.5 million worth of damages, can be improved, and the threat to the many people who reside in the area can be eliminated.

Another project which I urge you to favorably consider is the dredging of the Upper Newport Bay, which is of great interest to the people of the Fortieth District.

During the 1930s, the Corps was given responsibility to dredge and maintain Newport Bay, but authorization stopped at the Pacific Coast Highway bridge. Because of this omission, the average depth of the Upper Bay is only six feet, which poses a serious threat to boats that try to navigate the waters at low tide.

The siltation problem has also begun to encroach upon the Lower Bay, which has filled in nearly seven feet and is also becoming a navigational problem.

Therefore, I request that the $2.5 million to dredge and maintain the Upper Newport Bay to a depth consistent with the Lower Newport Bay, as authorized in H.R. 6, be appropriated as authorized.

Last, I would invite your attention to the Administration's request of $1 million for a comprehensive study by the Corps of Engineers of the coast of California.

In recent years, the Orange County coastline, along with numerous California coastal areas, has been severely damaged by storm surf and high tides.

I commenced the authorization of this study some years ago, when the Oceanside Harbor and beach erosion problem was great, and the upstream and downstream people encouraged a study that would cover the whole southern coast, of the southern California area, where the problems of beach erosion and harbor erosion were most rampant.

I would encourage the continuation of that study as being a cost saving mechanism over the next decade, really.

All of the foregoing projects are vitally important to the District I represent. They are essential in terms of protecting lives and property and guaranteeing adequate navigation.

Thus, I strongly urge the committee to approve the appropriations levels as recommended by the Administration so that these necessary projects can proceed without further delay.

I would request that the balance of my statement be included in the record.

Mr. FAZIO [presiding]. I would suggest that those members other than Mr. Anderson may want to go and record their vote and come back.

[The statement of Mr. Badham follows:]

TESTIMONY OF THE HONONORABLE ROBERT E. BADHAM

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES
APRIL 16, 1986

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to testify before you today on behalf of water projects in the 40th Congressional District of California.

First of all, along with my colleagues from Southern California and local representatives from the Orange County area, who you will hear from later today, I would like to express my support for the full $3.5 million funding level that the Administration has recommended for continued engineering and planning studies for flood control along the Santa Ana River.

By now, it is well recognized that the Santa Ana River poses the worst potential flood threat in the Western United States. Without further flood control improvements along the Santa Ana River, future floods could have a devastating impact on this area in terms of thousands of lives lost and billions of dollars in property damage.

It has been nearly ten years since an omnibus water resource bill has been authorized by Congress. This year, however, both the House and Senate have approved authorizing legislation in the forms of H. R. 6 and S. 1567, respectively. Since the Santa Ana River Project has been included in both these bills, it is likely that the Corps of Engineers will be able to keep the project on schedule for completion of the Phase II General Design Memorandum in 1988 and begin contruction in 1989, provided that the Administration's request for $3.5 million is approved.

In addition, I believe that it is very important that the $550,000 funding (as requested in the President's budget) be provided for the Interim Report III which involves the West Orange County Flood Channels (Talbert, Coyote Creek, East Garden Grove, Wintersburg Huntington Beach and Greenvill-Banning) of the Santa Ana River project. These funds are necessary so that the leveed channels which overflowed in March, 1983 causing $3.5 million worth of damages can be improved, and the threat to the many people who reside in the area can be eliminated.

Another project which I urge you to favorably consider is the dredging of the Upper Newport Bay which is of great interest to the people of the 40th District. During the 1930's, the Corps of Engineers was given responsibility to dredge and maintain Newport Bay, but authorization stopped at the Pacific Coast Highway (PCH) bridge. Because of this omission, the average depth of the Upper Bay is only 6 feet which poses a serious threat to boats that try to navigate the waters at low tide. The siltation problem has also begun to encroach upon the Lower Bay which has filled in nearly 7 feet and is also becoming a navigational problem. Therefore, I request that the $2.5 million to dredge and maintain the Upper Newport Bay to a depth consistent with the Lower Newport Bay (as authorized in H. R. 6) be appropriated.

Lastly, I invite your attention to the Administration's request of $1 million for a comprehensive study by the Corps of Engineers of the coast of California. In recent years, the Orange County coastline, along with numerous California coastal areas, has been severely damaged by storm surf and high tides. This study would provide an understanding of how waves, tides and currents change the coastline in order to make harbor planning, beach erosion control, and harbor dredging operations more effective.

All of the foregoing projects are vitally important to the District I represent. They are essential in terms of protecting lives and property and guaranteeing adequate navigation. Thus, I strongly urge the Committee to approve the appropriations levels as recommended by the Administration so that these necessary projects can proceed without further delay.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. GLENN M. ANDERSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. FAZIO. Glenn, we would like to let you have the time at this point. We appreciate the work you do for all of us on the Public Works Committee, and look forward to hearing your remarks.

Mr. ANDERSON. Well, thank you, Mr. Chairman. It is a privilege to be here to appear before this distinguished subcommittee and to submit recommendations for funding of certain water-related public works projects that are vital to my District and the State of California.

I want to join you in welcoming our many friends who have made the journey eastward with the California Marine and Navigation Conference, to afford us the benefit of their expert views on many pertinent topics. From Los Angeles, we have with us today City Councilman John Ferraro, President of th Port Commission, Joe Zaninovich, and Port Officials Ed Gorman, Don Mossman, Earl Clerk and Chuck Gibson; and from Long Beach, we have Port Officials Travis Montgomery and Dan Allen. Several others are scheduled to arrive this afternoon.

My purpose in participating today is in behalf of the Ports of Los Angeles and Long Beach, (L.A.-L.B.) which is recognized throughout the international shipping community as one of the premier harbor facilities in the world.

Together, the Ports of L.A.-L.B. generate more than $10 billion a year in economic activity throughout Southern California, and about 300,000 jobs are directly or indirectly related to the two ports.

And, as some already know, our Federal Treasury is probably the biggest single winner in L.A.-L.B. Harbor activities through increased U.S. Customs Service collections.

In fact, during the past year, fiscal year 1985, alone, Customs collections at the Ports of L.A.-L.B. hit a record $1.986 billion. This year, we can expect this figure to easily surpass $2 billion.

The total collections from the whole country is about $10 billion, and 1/5th of this is collected at the ports of LA/LB.

In cooperation with the U.S. Army Corps of Engineers, the Ports of L.A.-L.B. have developed a long-range master plan, i.e., "2020 Plan", to promote and encourage the efficient, economic and logical development of the Harbors.

This important study has already demonstrated the need for new navigation channels and 2,600 acres of new landfill development. With the plan, annual Customs collections will total $6.2 billion annually by 1992.

Without the 20-20 plan, these receipts will top out at $2.2 billion annually beginning in 1992. The Ports and the Corps wish to continue the study by doing a feasibility report on the project, and it is requested that $500,000 be appropriated for this effort.

I would now like to turn my attention to the L.A.-L.B. Harbor Hydraulic Model, which is operated and maintained by the Corps of Engineers at the U.S. Army Waterways Experiment Station in Vicksburg, Mississippi.

Since 1982, the Corps has been in the process of compiling needed data of tidal circulation, wave energy and ship motion in the San Pedro Bay area.

Because the Administration's fiscal year 1987 budget request includes only $140,000 to maintain the model, needed testing could not occur. I ask that you appropriate an additional $1,160,000, for a total appropriation of $1.3 million, so that this program will be allowed to continue.

It is my understanding that the Corps of Engineers has the capability to continue this program if funded.

Lastly, I fully support the joint recommendations of C-MANC, the Port of Long Beach and City of Long Beach concerning the need for annual maintenance dredging at the mouth of the Los Angeles River.

Flood-deposited silt in this area continues to be a serious problem and hinders the use of navigable waters for commercial boating activities.

An appropriation of $1.2 million is needed to perform the necessary maintenance dredging at the mouth of the River and the basins and channel seaward to a depth of 30 feet mean low low water.

The dredged material should be used for filling scoured edges of the river channel, replacement of the sand on the beaches in Long Beach south of the river, or for creation of landfills in adjacent areas.

In totaling up the figures, Mr. Chairman, I am requesting $3 million for three projects at the Ports of L.A.-L.B. during fiscal year 1987. And, as I have already said, Customs collections will total over $2 billion during this same time period at these two ports.

Thus, should these three items be fully funded, the Treasury will gain $670 in Customs revenue to every $1 spent in Corps of Engineers operating funds; which, of course, is not too bad of an investment.

In conclusion, I again want to thank the subcommittee members for this opportunity to testify, as well as for your continued support and cooperation with respect to these projects.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. JERRY LEWIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. LEWIS. Mr. Chairman, I am not on this subcommittee, but would like to speak for the full Appropriations Committee, I would like to express our appreciation for the great service that Glenn

Anderson has been on water and transportation matters, not just to the House, but particularly for the California Delegation.

Mr. **Myers**. Did you tell us something new we haven't heard through the years? Did I miss something?

Mr. **Anderson**. Well, annual Customs collections at the Ports of LA/LB will rise to over $6 billion by 1992.

Mr. **Myers**. The price has gone up.

Mr. **Anderson**. And, so has the return to the Treasury.

Mr. **Fazio**. Mr. Lewis is going to be honored tonight by you and Dan Lungren for the work he has done on the Port of Long Beach.

Mr. **Lewis**. Thank you, Mr. Chairman.

I would like to take a moment to introduce Fred Cantowi, representing San Bernardino Flood Control District.

I would like to have the committee recognize a gentleman who has been of great service to California over the years, a former member of the State Assembly, the Chairman of our Legislative Water Committees, and he has served on the District Court of Appeals, and now Chairman of the California Water Commission, a great friend who understands our problems, Gordon Cologne.

One bit of good news. Your committee, as well as the authorizing committee, has been very helpful in working out the problems relative to the Santa Ana Project, the major flood control project left on the west that needs work.

Some of the difficulties we had upstream with alternatives to the Mentone Dam have been worked out very well, due to the language and support of this subcommittee.

We look forward to continuing progress, and we have a number of other key projects that you are possibly considering that we will hear about later in the day.

I appreciate your receiving my complete testimony for the record.

Mr. **Fazio**. Thank you, Mr. Lewis.

[The statement of Mr. Lewis follows:]

ENERGY AND WATER SUBCOMMITTEE

Mr. Chairman and Members of this Committee, this year I come before your committee with good news. The problems and delays regarding the Santa Ana Flood Control project appear to be resolved. We were briefed by the Col. of the Los Angeles Corps of Engineers yesterday and the progess is better than anyone could have hoped. In fact, today Col Butler will be presenting the proposed Upper Santa Ana dam alternative to the Board of Rivers and Harbors. We believe we will receive the Board's approval. I also believe, thanks to the assistance of the Public Works Committee, that we will soon have the authorization for the construction of this critical flood control project. We are very grateful for the special attention this committee has given to our sometimes controversial project. With any luck, next year we will be testifying in support of contruction funding.

Further in my district, the Los Angeles Department of Public Works has been working on a Flood control plan and the Corps has been studying the problem call Antelope Valley. My problem is that they have not been working together. As you probably remember, last year this committee was generous in providing $260,000 for an enlarged flood control study. The Corps has only been able to set aside $215,000. This money will not be used to extend the study, it is being spent to compile a final report which will state that there is no civil works benefit. Yet we have a large air force base there, Edwards Air Force Base, that has very significant water needs. I hope this committee can be helpful in directing the Corps to cooperate with Los Angeles and the Base to develop a master plan for flood control and water conservation for the growing area. I have a draft of report language that I would like you to consider adding to your bill.

As you may remember, for the past few years I have been supportive of a Corps study in my district examining the various alternatives for construction improvements on San Timoteo Creek. That community is another area in my district that is growing by leaps and bounds. I am very supportive of this project and would like to include in the record a memo from the City Engineer of Loma Linda regarding the justifications for this project.

Regarding a small water rights problem in my district near the community of Needles, I would like to provide this committee with a copy of the Bureau of Reclamation's proposal to drill wells near the All American Canal to provide water for the small well owners that depend upon the Colorado River. This proposal would drill three to five wells to recover seepage for the canal.

As always, I am personally grateful for all the assistance this committee has provided the citizens of California. It is alwyas a pleasure to testify here.

Report of the Subcommittee on Energy and Water Development

The Chief of Engineers is authorized and hereby directed to perform a focused study of the drainage basin for Rosamond and Rogers Dry Lakes, site of Edwards Air Force Base in the Antelope Valley, to determine the effect of storms that could be expected to occur once every 5, 10, 25, 50 and 100 years with and without the facilities proposed to be built in the Los Angeles County Department of Public Works Comprehensive Plan for Flood Control and Water Conservation for the Antelope Valley, considering runoff from Los Angeles, Kern and San Bernardino Counties. The Chief of Engineers is further authorized and directed to determine what facilities should be added to, or modified within the Los Angeles County Comprehensive Plan in order to optimize flood flows entering the dry lakes. Funds for this study shall be provided from unexpended funds in the 1986 FY appropriation for the Antelope Valley Streams Study.

CITY OF LOMA LINDA
11128 Anderson St., Loma Linda, California 92354 • (714) 796-2531
From the Office of : City Engineer

Date: March 6, 1986

To: Robert R. Mitchell, City Manager

From: Noel L. Christensen, City Engineer

Subject: Meeting with San Bernardino County Flood Control District and Corps of Engineers re: San Timoteo Creek Improvements

As you directed, I attended a meeting on March 4, 1986, with representatives of the Corps of Engineers and San Bernardino County Flood Control District. I am attaching a copy of the meeting participant list for your information.

The intention of the meeting was to review the progress made by the Corps of Engineers feasibility team who have been examining the various alternatives for constructing improvements on San Timoteo Creek, along with the resulting benefit cost ratio for the alternatives. Their task was to not only look at the feasibility from a construction standpoint but also the feasibility economically since if there cannot be an annual benefit to the property at least equal to the cost of the improvements, the Corps of Engineers cannot obtain Congressional approval for authorization and appropriations for construction. The potential damages they studied are three general types: A breakout of the channel resulting in flooding and structural damage to buildings, sedimentation or depositing of debris on properties, and the lack of capacity in the existing channel resulting in the overall problems.

Three alternatives for construction were considered by the design team. One included a debris basin at the mouth of San Timoteo Canyon. This one was discounted due to the extreme costs involved in trying to route the railroad around and over the debris basin. This alternative also included a vertical wall concrete channel from the debris basin to San Timoteo Creek.

The second alternative included a vertical wall concrete channel without the debris basin anticipating that significant velocities could be achieved in the channel and relatively self-cleaning design could be obtained. This alternative included the reconstruction of existing bridges at Beaumont, SPRR Branch, Redlands Boulevard and Waterman Avenue. This design alternative had an estimated cost of $24 million in October 1985 dollars.

The third alternative involved a sloping sidewall concreted rock protection with a "soft" or unlined bottom. This one also required the replacement of the Van Leuven Bridge and Poplar Street Bridge in addition to the four bridges included in the second alternate due to the fact that a significantly wider channel would have to be constructed due to the sloping sidewalls. This alternate also had an estimated cost in the range of $24 million.

Of the three alternatives the second with the vertical wall concrete lined channel was chosen as being the most cost effective and space efficient. The concerns with the sloping sidewalled concreted rock channel was that significant amounts of additional rights of way would have to be obtained and it would be extremely difficult and expensive coming through the City of Loma Linda.

When the benefit cost ratio is determined the basis for it is how much protection can be provided to properties if the design facility is constructed. If properties are undeveloped and would normally have to import sufficient amounts of fill to raise the properties to a point where they would be safe from the 100 year storm, those properties will then receive the benefit based on the cost savings of not having to import the material. If the project has already been developed and is at an elevation lower than the 100 year storm, the elimination of potential damage to the existing facilities by constructing the improvements is considered as the benefit. If however the City has been requiring that developments elevate structures above the 100 year storm and properties have developed in that fashion there is no benefit presumed to accrue to the property through the construction of the drainage facility. Therefore, the older existing part of Loma Linda which is subject to inundation receives benefit and contributes towards the benefit portion of the benefit cost ratio. Conversely, the newer developments that already have developed provide no benefit to the benefit cost ratio and in effect are a detriment in trying to justify the construction of a facility.

The original benefit cost ratio for the chosen alternate was 0.5. This is far below the 1.0 minimum that is required. The study team then looked at the variations of the chosen alternate.

The first variation included starting the Corps project at Mountain View Avenue and outletting it at the Santa Ana River. The City and County would have to collect the water at the mouth of the canyon and transport the flow to Mountain View where the Corps would pick the water. This benefit cost ratio was 0.6, still too low.

The second variation to the alternate investigated by the Corps was to begin at Mountain View Avenue and end at Interstate 10. Both the upstream and downstream portions would then be excluded from Corps participation, however it would be the responsibility of the local agencies to fund those two reaches. The benefit cost ratio of this segment was between 0.8 and 0.9, still below the magic 1.0 number.

The cost of the various reaches considering that the "upstream" is from the mouth of the canyon to Mountain View, the "middle" is from Mountain View to Interstate 10, and the "downstream" is from Interstate 10 to the Santa Ana River is as follows:

San Timoteo Cost of Improvements
(in Millions of Dollars)

Construction Segment	Local	Federal	Total
Upstream	$10.00	-0-	$10.00
Middle	$ 3.3	$6.2	$ 9.5
Downstream	$ 4.5	-0-	$ 4.5
Total	$17.8	$6.2	$24.0

I will keep you advised of any additional information that I receive on this.

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WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. GEORGE MILLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **FAZIO**. At this time, I would like to call on Congressman George Miller, and now that my colleague, Glenn Anderson, has brought you all that revenue, I have some plans for a small portion of it.

Mr. **MILLER**. Mr. Chairman and members of the subcommittee, I am once again delighted to appear before you this morning to discuss several projects in the Seventh District of California.

Over the years, this subcommittee has been extremely responsive to the needs of the District I represent. You have approved studies, new projects and improvements which are very important to the economic growth and improvement of Contra Costa County, and on behalf of our county, I want to thank you for your continued interest.

As the chairman of the Subcommittee on Water and Power Resources, which authorizes many of the projects funded by this subcommittee, I am very pleased by the highly productive working relationship we will continue to enjoy for many years to come.

I also want to acknowledge several of the local officials from Contra Costa County who join me here today: Supervisor Tom Powers, Water District Directors Craig Randall and Don Freitas and General Manager John DeVito. We all appreciate your courtesy in hearing our views this morning.

Let me take a moment of your time to mention briefly some of the key projects for which we seek support. All of these are well-known to the members of this subcommittee and have earned your support over the years because they are environmentally sound and fiscally responsible projects.

Last year, this subcommittee and the entire Congress accepted my recommendation that we appropriate sufficient funds to permit the initiation of construction of this long-delayed flood control project during the current fiscal year.

The floods we suffered this year in the North Richmond area damaged over 200 homes and businesses and again confirmed the urgent need to move forward with this project. We are all looking forward to the ground-breaking this fall.

I want to especially acknowledge the outstanding work of Supervisor Tom Powers in coordinating the various local organizations who have been deeply interested in the construction and design of this project.

As a result of his efforts and those of many other committed individuals, we have agreement on design, on local cost sharing. The recommendation of the Administration and the California Water Commission is for $4 million for continuation of construction for fiscal year 1987, and I strongly support that request.

Walnut Creek Flood Control Project:

Once again, during this year's very heavy rains, the work already completed on this major flood control project demonstrated how important its completion is to our central county. I support the $11 million request for construction this year.

Kellog Reformulation Study, Offstream Storage Studies: We anticipate that the Bureau of Reclamation will complete the feasibility study on the Kellogg project, which was authorized by my legislation and supported by this subcommittee. It is my intention to conduct hearings on this proposed project in my own subcommittee later this year, after submission of the Bureau's report.

I do request $350,000 in continued funding for the study of offstream storage, including the Los Vaqueros Project. Both Kellogg and Los Vaqueros offer not only my District and the Bay Area, but all of California, the option of greater storage, greater water quality protection for the Delta, and potentially additional water for export to other regions of the State.

Both of these projects have enjoyed strong support from our entire Congressional Delegation.

I want to note that the Contra Costa County Water District has already offered to advance funds for the purchase of lands at the Kellogg site. This offer demonstrates the commitment of local people to this project because of the great benefits it could provide to a very wide variety of interests, both within our county and elsewhere throughout the State.

It is my understanding that the Bureau will require language in this year's appropriations bill affirming that the Bureau may accept these local advances for planning studies which will then be offset against the future local share, and I would request that such language be included in the bill.

The San Luis Unit represents a more controversial and complex problem. You are all aware of the very serious selenium contamination resulting from irrigation runoff which has compelled the closure of the Kesterson Reservoir.

If not properly addressed, the drainage problem in the Valley could pose a serious threat to the future of some highly productive agricultural areas of our State. It is therefore extremely important that we work together to assure that an appropriate and effective drainage system is implemented.

Our Delegation has come together on one very important point: The solution to the contamination at Kesterson will not be to export that hazardous waste water to other areas of the State, whether that be the Delta or the Pacific Ocean or San Francisco Bay.

I believe that there is a consensus that the drainage problem will have to be addressed in the Valley itself.

Unfortunately, the Administration has failed to present an acceptable drainage plan to my subcommittee. The legislation proposed by the Secretary was so untenable that it was rejected by every member of the subcommittee, and has not yet been introduced by any member of the House.

While I do not object to inclusion of funds for the San Luis Unit in this appropriations bill, I must insist that the expenditure of any of those funds be conditioned upon enactment of necessary authorizing legislation, as required by this committee last year.

The solution of this drainage problem will be a complicated and potentially costly undertaking. Let us not start down that path without clear instructions from the appropriate committees.

Mr. Chairman, the members of this subcommittee and the Congress in general have supported our effort to secure $3.7 million for drainage studies, which would be conducted jointly by the Westlands Water District and the Environmental Defense Fund.

On behalf of the other members of our Delegation, I want to thank you for your leadership in appropriating these funds. I know that you share my sense of frustration that the Secretary of the Interior has persisted in his inaccurate and obstructive argument that he lacks authority to expend those funds, which clearly have been approved by the Congress for the purpose of expediting the solution of the drainage crisis in the Central Valley.

Lastly, I urge that this subcommittee include in this legislation, as you have done annually at my request, an absolute prohibition on the expenditures of any funds for the study or construction of the San Luis Drain or any other facility to transport agricultural waste water out of the Central Valley to the Delta.

As in past years, I want to support the continued work of the Corps of Engineers in the construction of ship channels and the maintenance of harbor dredging at the Port of Richmond. These projects are very important to the future of marine navigation in northern California, and they have long enjoyed the support of the Congress.

There are some concerns which have been raised about the potential environmental impacts of these dredging operations, and some recently disclosed concerns about the presence of DDT in the dredged materials around two channels of the Richmond harbor.

I am sure that the subcommittee joins me in advising the Corps to pay special attention to these potential problems so that they do not promote the degradation of water quality in the Delta-Bay system, or create public health problems because of DDT in the food chain.

Mr. Chairman, that concludes my statement today. Again, we in Contra Costa County appreciate the consideration and support extended by this subcommittee over the years. I would be pleased to respond to any questions which the subcommittee may raise about my testimony.

There appears that there is some emerging problem with respect to a toxic waste site that may or may not be in the dredging area within the Richmond harbor, and we would like the Corps to recognize that there may be a special problem with that.

With that, I conclude my testimony to again thank this committee for all of the help. I have had the pleasure of having you and other members of the committee visit the Seventh District to see some of these projects. Each and every year that we are hit with dramatic rainfalls, we once again thank both the Lord and this committee for all of the help that we have received, not necessarily in that order.

It is moving more towards this committee every year, I must tell you. Unless the Lord starts pouring concrete, Mr. Chairman, we are in a lot of trouble. Thank you very, very much.

Mr. **Bevill** [presiding]. Thank you George, very much.

Mr. **Miller**. Thank you.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. BARBARA BOXER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **BEVILL**. Next, we have our good friend and colleague, Congresswoman Barbara Boxer. We are always pleased to have you with us.

Mrs. **BOXER**. I will be brief and submit my testimony for the record, and just summarize it.

I border on Mr. Miller's District, so we share the same problems in terms of flooding, and again, I want to add my voice of thanks to his to you personally and to members of the committee for being so responsive and helpful to the people that I represent.

I want to quickly mention a few people who are here, Mr. Bernardi from San Rafael, Mr. Cheney and Senator Milton Marks, our State Senator, and we are happy he is here.

I appeared before you last year with great distress because a dredging project that has historically been put into the Administration's budget of whichever Administration is in office, every six years, was missing; and the San Rafael Canal has been silting up to very dangerous levels, making it impassable and causing terrible flooding problems.

This committee, with the help of your fine staff, assisted me greatly last year, and you did appropriate $1 million toward a $2 million dredging project.

This year, the President's budget did not put that second $1 million into the budget. Obviously, we got this project started. We have to complete the dredging. That is all I am asking you for this year, because you have been so good to me in the past.

We are solving our problems, so I would ask that you would appropriate this year $1 million to finish up this very important project, which is a Corps-authorized project: The San Rafael Creek Navigational Dredging Project in Marin County, California.

[The statement of Mrs. Boxer follows:]

Testimony of Congresswoman Barbara Boxer
before the House Appropriations Subcommittee on
Energy and Water Development
April 16, 1986

Mr. Chairman and Members of the Subcommittee, thank you very much for this opportunity to testify today on the FY 1987 Appropriations for Water Resources and Development.

The San Rafael Creek navigational dredging project in Marin County, California, was authorized as an ongoing maintenance project under the Harbors and Rivers Act of 1919. The Corps of Engineers has routinely dredged this project about every six years.

Last year, however, the President's budget did not include funds for this scheduled dredging. I requested that $2 million be approved by this committee to conduct this dredging because of the dire situation that the San Rafael Canal community has been facing. The Canal had become dangerously shallow due to siltation and a history of flooding problems.

This Subcommittee was able to approve half of my request last year, appropriating $1 million to the Corps of Engineers for the first phase of dredging. The Corps informs me that that phase, which includes dredging the channel across the flats leading up to the Canal itself, will be completed in August 1986. (The solicitation for bids went out on March 31, 1986.)

This year the President's budget for FY 87 did not include any funds to complete the San Rafael Creek dredging of the inner channel which is the Canal itself. I am asking that this Subcommittee recommend that the second phase of this project be completed and that $1 million be appropriated in the Corps budget for this purpose. When the first phase of the dredging is completed this summer, it will be essential to finish the dredging inside the Canal so that it is once again easily passable.

The use of the Canal is vital to a healthy and thriving water-oriented business sector and to the residential community. Hundreds of jobs, significant revenues and a boating industry are all dependent on the navigability of the Canal.

Let me reiterate that this is not adding a new project to the budget, but merely maintaining a project that was scheduled and authorized previously. With the approval of $1 million for FY '87, the Corps will be able to dredge the inner channel of the Canal to a six foot depth for about 1.7 miles.

I hope that you will be able to approve this funding and I thank you for your consideration.

Mr. **Bevill**. I am sure that was just an oversight.

Mrs. **Boxer**. Oh, I think so, too, I think they overlooked it.

Mr. **Bevill**. We appreciate your testimony.

Wednesday, April 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. WILLIAM E. DANNEMEYER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **Dannemeyer**. I have a statement here from myself and Mr. Lungren, and I would like to offer them for inclusion in the record.

Our colleague, Mr. Lungren, speaks in support of a project which I am in support of also, the Santa Ana River Flood Control Project.

Our State is 1,000 miles long. In northern California, earlier this year, we had a week solid of rain that brought over 15 inches. If that quantity of rain would come in southern California at one time, we would have probably sustained the flood that many of us hope will never come, and that is, the Santa Ana River system is the most hazardous flood control threat west of the Mississippi in the country.

Thank God, we didn't have that rain in southern California. It was in northern California, and they could use it because they got all the trees up there, and they need to be watered.

We have unanimity on behalf of the Delegation in the Santa Ana Basin, eight House members, two Senators from our State.

I would like to be here and ask for appropriations for building it, but we are not quite to that point, I don't believe, and I am asking $3.5 million for continuing engineering studies.

You may recall at one point, we had a slight problem relating to about a third of the project, Mentone Dam, that has not been resolved, and I believe the approval of—the modification of that project will be approved by the Army Corps of Engineers shortly, so that is the message that I bring on behalf of my Delegation, and thank you for your past assistance and understanding of our problems, and wish you Godspeed in your work.

Mr. **Bevill**. Thank you, Bill.

[The statements of Mr. Dannemeyer and Mr. Lungren follow:]

STATEMENT OF THE HONORABLE WILLIAM E. DANNEMEYER
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
WASHINGTON, D.C.
APRIL 16, 1986

Mr. Chairman and Subcommittee members, I appreciate the opportunity to address you today concerning the Santa Ana River Mainstem flood control project. Along with my fellow Southern California colleagues, I come before you in support of the Army Corps of Engineers' appropriation request of $3.5 million for the continuation of planning and engineering for this vital California project.

It has been almost a decade since an omnibus water project bill has been authorized. As a result, there are many worthy projects that have been neglected or delayed because we could not agree on various aspects of water development and deficit reduction. This year the House of Representatives has passed authorizing legislation in the form of H.R. 6 and the Senate is working on its version, S. 1567. Since the Santa Ana Mainstem project has been included in both bills, it is highly likely that Southern California may finally receive the flood protection that it needs. This project cannot become a timely reality, however, if planning and engineering are not continued. This is the issue that we face today.

By now everyone knows that the Santa Ana River is the worst flood threat west of the Mississippi. The Army Corp of Engineers has estimated that a standard project flood could result in the loss of over 3,000 lives and $18 billion in property damage. Ninety-five percent of this damage will occur in Orange County and, in the event of a flood, my district would be one of those most severely impacted.

This year California has been inundated by heavy rain. The most severe rain, however, occured in Northern California where extensive damage led the governor to declare a state of emergency. If severe rain and heavy snow melt were to combine along the Santa Ana River today, communities from Riverside, San Bernardino, and Orange Counties would be forced to declare a similar state of emergency.

The need for flood protection along the Santa Ana River has been recognized for decades. Both California Senators, all eight Representatives, and local leaders for the three affected counties have traditionally worked together to find a plan acceptable to all interests in the region. When local officials raised problems over the Mentone Dam, all three counties supported an upstream study to find an alternative to the controversial dam. This study has been completed and the Army Corps of Engineers Board of Rivers and Harbors is expected to review and approve the upstream study this week. With the approval of the Army Corps and local leaders, and with the Senate's revised language specifically authorizing the upstream dam, the last element of controversy has hopefully been removed. The bipartisanship which has marked this project from the start can now focus on ensuring that construction begin in 1989.

Currently the Army Corps is on schedule for completion of the Phase II General Design Memorandum in 1988. The Administration's request will allow the Army Corps of Engineers to continue to stay on schedule and prepare for construction to begin in 1989.

Under the administration's cost sharing proposal, area residents will be responsible for approximately $380 million of the project's cost. While the local strategy for raising the necessary cost sharing funds is yet to be determined, there is no doubt that affected residents support the Santa Ana Mainstem project.

The longer the project is put off the higher the risk that a severe flood will occur, endangering lives and doing considerable damage. With the potential loss of life in the thousands and the potential property loss in the billions, the benefits of this project will far outweigh the costs. These risks are not only unacceptable to Southern California residents but to the nation as well. I ask that the Subcommittee on Energy and Water Development approve the administration's request of $3.5 million in an effort to ensure the prompt construction of this important project.

Once again, I appreciate the opportunity to present the merits of this vital Southern California project.

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Testimony of Daniel E. Lungren

The Energy and Water Appropriations Subcommittee

April 16, 1986

Mr. Chairman, thank you for the opportunity to participate this morning with representatives from the State of California to request appropriations for various water projects. Specifically, I would like to mention the Santa Ana River Flood Control Project, including the basin and Orange County Interim III studies, dredging of the mouth of the L.A. River, and the Bolsa Chica/Sunset Harbor project.

There is no question that construction of the Santa Ana River Flood Control Project and continued study of the river basin channels must go forward as soon as possible. Both the House and Senate Water Resource Bills contain a construction authorization for this project, including the newly proposed upstream alternative to the Mentone Dam. As you know, potential economic losses and damages from a flood on the Santa Ana River makes this flooding problem the worst west of the Mississippi. The Army Corps of Engineers estimates that if a standard flood occurred today, two million people would be affected with property damage over $13 billion. Although we must carefully scrutinize all federal expenditures, both safety and financial considerations make this a wise expenditure of federal dollars. When the cost of this proposal is weighed against the potential cost of federal disaster claims and loss of federal tax revenue, the evidence to support the project is compelling. The President's budget includes $3.5 million for continued engineering work and $600,000 for basin Interim III studies. I support the President's request for these projects.

I also support the President's $1.4 million request to dredge the mouth of the L.A. River at the Queensway Bridge in Long Beach, California. Due to heavy rainfall runoff in the Los Angeles/Long Beach area, 200,000 to 300,000 cubic yards of silt and sediment are deposited at the river's mouth every year. This situation is compounded by operational decisions made by the Corps at Hansen Dam, situated at the headwaters of the L.A. River. The sediment deposits create substantial hazards and significantly restrict the use of the navigable waters by both commercial and recreational boating activities. An appropriation of $1.4 million would allow the Corps to remove the deposits and to insure operation depths of -20 feet.

In addition, I would like to mention my support for the continuation of the Bolsa Chica/Sunset Harbor Feasibility Study. According to the Corps of Engineers, it will take an additional $884,000 to complete the study. The Corps, which received $250,000 in the FY 1986 bill, has recently appointed staff to work with the local sponsors to develop a coordinated Plan of Study. The House Water Resources Bill, H.R. 6, contains a provision authorizing the Sunset Harbor/Bolsa Chica project, including an innovative financing provision which requires the local sponsor to pay back the full federal contribution, both for studies and construction, with interest. The Senate bill contains a similar financing provision. It is my understanding that some local officials will be requesting an additional appropriation for the feasibility study. I support this appropriation provided that (1) the payback language in H.R. 6 is adopted prior to the release of the funds, or (2) specific language is included in the appropriations bill requiring local/private funding of the study.

Again, thank you for the opportunity to testify on these projects.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. ANTHONY C. BEILENSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BEILENSON. Thank you very much. I have no one with me, and I won't take too much of your time, and we have a statment which we will submit to you for the record.

I am here, Mr. Chairman and members of the subcommittee, to ask your support for additional funding for recreational development in the Sepulveda flood control basin.

Sepulveda Basin is located in the San Fernando Valley, and lies within the Congressional District I represent.

We very much appreciate the help of this subcommittee in obtaining a $2.6 million appropriation for the Basin last year, and we hope that additional funding will be made available for fiscal year 1987 to continue work on this project.

The $2.6 million appropriated last year will cover the cost of building a boating and fishing lake, which will be the center of an informal picnicking and park area. Construction of the lake is scheduled to begin in January 1987, and is expected to be completed within the year.

But in order for people to use and enjoy the lake and the area surrounding it, additional funds will be needed for access roads, parking, landscaping, sewers, electrical utilities, drinking fountains, and restrooms.

To begin building those facilities, we are requesting that the subcommittee recommend additional funds for fiscal year 1987.

The entire recreational project is expected to cost $20 million. It will include not only the lake and surrounding informal park, but also a wildlife area centered around a second, smaller lake, and several playing fields.

However, because construction is being carried out under a 50-50 cost sharing arrangement with the City of Los Angeles under the Corps' Code 710 Program, the Federal portion will be only half that amount, $10 million, over the life of the project. Thus, the remaining Federal share will be only $7.4 million.

Once this last phase of development has been finished, the Corps' work, which began over 40 years ago, will be completed, and its role will be limited to simply maintaining the Sepulveda dam.

The City will assume all operations and maintenance expenses for the new recreational facilities, as it does now, and always has, for all of the recreational land it leases.

Because the City does assume those expenses at Sepulveda Basin, we are again seeking from the subcommittee an exemption from the Corps' policy which calls for local sponsors of a 50-50 cost sharing project to assume operation and maintenance costs at a Corps project equal in value to the Federal contribution for development costs of the sponsored project.

This policy was apparently designed to help relieve the Corps of recreational operation and maintenance expenses at Corps' projects.

However, at Sepulveda Basin, the Corps has not paid for any recreation operation and maintenance expenses and, in fact, has not even paid for much of the recreation development costs.

From 1959, when the first recreational uses were begun, to the present, the City of Los Angeles has assumed all of the operation and maintenance costs and 97 percent of the recreation development costs. All along, the City has paid for the kinds of recreation costs at the Basin that the Federal Government has paid for at many other projects.

Because the City has assumed such a large share of expenses at this Corps project, and will continue to do so, it does not seem fair or logical to require Los Angeles to pay for operation costs of a Corps project somewhere else in the U.S. as a condition for participation in the Code 710 program.

Thus, we are asking the subcommittee to exempt this project from the Corps policy, as was done when funds were appropriated last year.

When this development is completed, we will end up providing for about 70 percent of the recreational needs of the over 1.5 million people in the San Fernando Valley, which makes up a little more than half of the City of Los Angeles.

Any continuing help that this subcommittee can give us will be greatly appreciated, and we thank you for your past help.

Mr. BEVILL. We will certainly work with you. We appreciate the help that you give us when we come before your committee for a rule.

Mr. BEILENSON. Thank you all very much.

[The statement of Mr. Beilenson follows:]

STATEMENT OF CONGRESSMAN ANTHONY C. BEILENSON
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
OF THE HOUSE APPROPRIATIONS COMMITTEE
APRIL 16, 1986

Mr. Chairman, I appreciate the opportunity to testify before this subcommittee today in support of funding for recreational development in the Sepulveda flood control basin. Sepulveda Basin is located in the San Fernando Valley, and lies within the congressional district I represent.

We very much appreciate the help of this subcommittee in obtaining a $2.6 million appropriation for the Basin last year, and we hope that additional funding will be made available for FY 87 to continue work on this project.

Sepulveda Basin is an Army Corps of Engineers' flood control project which was begun in the 1930's. Almost one-half of the Corps' land in the Basin has been leased to the City of Los Angeles for recreational purposes, but there is still a large portion of undeveloped land available for future recreational use. The final phase of the Corps' development of the Basin will be the construction of recreational facilities on land that is currently--and inappropriately, in my opinion--being leased for private agricultural purposes. The City anticipates that when this development is completed, the Basin will provide about 70 percent of the San Fernando Valley residents' recreational needs.

Although planning for this last phase of development began several years ago, it was not until last year, when Congress appropriated $2.6 million to construct a recreational lake, that work on it actually got underway. That sum will cover the cost of building a boating and fishing lake, which will be the center of an informal picnicking and park area. Construction of the lake is scheduled to begin in January, 1987, and is expected to be completed within the year.

But in order for people to use and enjoy the lake and the area surrounding it, additional funds will be needed for access roads, parking, landscaping, sewers, electrical utilities, drinking fountains, and restrooms. To begin building those facilities, we are requesting that the subcommittee recommend additional funds for FY 87.

The entire recreational project is expected to cost $20 million. It will include not only the lake and surrounding informal park, but also a wildlife area centered around a second, smaller lake, and several playing fields. However, because construction is being carried out under a 50-50 cost-sharing arrangement with the City of Los Angeles under the Corps' Code 710 program, the federal portion will be only half that amount--$10 million--over the life of the project. Thus, the remaining federal share will be only $7.4 million.

Once this last phase of development has been finished, the Corps' work, which began over 40 years ago, will be completed, and its role will be limited to simply maintaining the Sepulveda dam. The City will assume all operations and maintenance expenses for the new recreational facilities, as it does now, and always has, for all of the recreational land it leases.

Because the City does assume those expenses at Sepulveda Basin, we are again seeking from the subcommittee an exemption from the Corps' policy which calls for local sponsors of a 50-50 cost-sharing project to assume operation and maintenance costs at a Corps project equal in value to the federal contribution for development costs of the sponsored project. This policy was apparently designed help relieve the Corps of recreational operation and maintenance expenses at Corps' projects.

However, at Sepulveda Basin, the Corps has not paid for any recreation operation and maintenance expenses and, in fact, has not even paid for much of the recreation development costs. From 1959, when the first recreational uses were begun, to the present, the City of Los Angeles has assumed all of the operation and maintenance costs and 97 percent of the recreation development costs. All along, the City has paid for the kinds of recreation costs at the Basin that the federal government has paid for at many other projects.

Because the City has assumed such a large share of expenses at this Corps project--and will continue to do so--it does not seem fair or logical to require Los Angeles to pay for operation costs of a Corps project somewhere else in the U.S. as a condition for participation in the Code 710 program. Thus, we are asking the subcommittee to exempt this project from the Corps policy, as was done when funds were appropriated last year.

Although we are facing extraordinary budget pressures this year, I believe that the relatively small cost of the Sepulveda project, which will serve the one and a half million residents of the San Fernando Valley, is a very good investment and a very worthwhile use of scarce federal funds. We greatly appreciate the help of this subcommittee in getting the last phase of development in the Sepulveda Basin started, and we hope that we will have your continued support as we move along with it.

Thank you, again, for this opportunity to testify and for your consideration of this request.

Mr. **Fazio**. Mr. Chairman? Could I take a moment while you and Mr. Myers are both here to indicate, I am sure the Delegation without exception, in a bipartisan sense, and I want to say this in front of the California Water Commission, wishes to express its aprecation to this committee, Mrs. Boggs, you as well, but certainly the chairman and the ranking Republican member for all they have done for California.

We make out like bandits, as they say. Relative to the total budget, California has done well for many, many years, and under the tenure of the two of you, we have nothing to complain about, and nothing but praise for the support you have given us.

You are the individuals from whence it comes, and we thank you very much.

Mr. **Bevill**. While we are thinking about it, too, we appreciate the excellent leadership that you exhibit here in this committee, and you know, California is well represented at this table.

When we close those doors after all the hearings and start writing the bill, we hear California's voice quite frequently.

Mr. **Myers**. We also get criticized equally. We draw a lot of fire once in a while, because of the energy needs of our country, and our children yet to be born, so it is nice to get an accolade once in a while.

We hope it is deserving. What is your trouble?

Mr. **Dornan**. I am here with more accolades.

Wednesday, April 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. ROBERT K. DORNAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **Bevill**. We are pleased to have our friend and colleague, Congressman Bob Dornan.

Bob, you may proceed as you wish.

Mr. **Dornan**. I have a statement here and I would like to ask that it be put in the record. It was slaved over by my staff, and says a lot of good things about the Santa Ana River Project, and also about you people, but I would like to talk from my heart.

I took a lot of criticism for saying on the House Floor last year that I would vote for the water bill even if this treasured project of my area was not in it, and the reason I said that was because in researching my own project, I came quite seriously to see the other good work that you folks did and how hard you worked on all areas of the country, as you put it, Mr. Myers, to leave something for our children.

In the area of energy conservation, and something that goes by the simple title of water projects, I felt maybe I had to pay my dues to show that I was appreciative of all the work you did across our broad and beautiful country, and maybe there would be a reward for me down the line.

So I am not asking you so much, as it says in this statement, but thanking you for all the hard work you have put on both sides of the aisle, and Mr. Fazio also.

Over two years ago, I bought a home in the dead center of the flood plain of the Santa Ana River in Garden Grove, and all of my treasured family photographs are in that home, going back generations. Give me a break.

See if we can't finally move this project forward. The President has asked for very small monies this year, and I think you have heard some eloquent testimony before me by people who have worked on this project for a decade.

I am new to Orange County and new to this project, but I feel it is worthy, and I thank you for your attention.

[The statement of Mr. Dornan follows:]

R

Honorable Robert K. Dornan

Testimony Before House Appropriations
Subcommittee on Energy and Water Development

Honorable Tom Bevill, Chairman
April 16, 1986

Thank you Mr. Chairman and Members of the Subcommittee. It is a pleasure to be here as a representative of the 38th District of Orange County, California, and to be able to join with my colleagues who for many years have come before this committee -- as I did last year -- in support of the Santa Ana River flood control project.

As you are by now well aware, the Boards of Supervisors of all three counties affected by the project -- San Bernadino, Riverside, and my own Orange county -- are in unanimous agreement in their support for the project and the Administration's request for $3.5 million in funding for Fiscal Year 1987. And I know from speaking with the various local officials that they have been impatiently awaiting the day when Congress will pass legislation authorizing construction to begin on the Santa Ana River project.

Today, I am here to ask you to follow the President's recommendation and appropriate the $3.5 million for continued study and preliminary planning and engineering on the Santa Ana River Mainstem project.

I would also request that the bill contain language clarifying exactly what projects money can be spent on, particularly instructing the Corps to use funds to complete the Phase II, General Design Memorandum, including the Upper Santa

Ana Canyon Dam Unit, which is being substituted for the Mentone Dam.

The completion of the entire study is especially important to the people of Santa Ana, Stanton, and Huntington Beach, all who live within the Santa Ana River flood plain, whose homes and businesses will be otherwise be destroyed when the Santa Ana River explodes its banks again.

In addition, this year's request for $3.5 million would allow the Corps to continue their work on the plans for raising and strengthening Prado Dam and widening, deepening, and stabilizing the channel of the river through my district, and several others in Orange County.

In past years, I know that this committee has been extraordinarily responsive to the concerns of other Members whose districts are in the Santa Ana River flood plain. Often times you have appropriated sums greater than those requested by the Administration because of the need to get on more quickly with the vital work on this project. I have no doubt that the Corps could effectively and efficiently use more money than what has been proposed for the Santa Ana River this year. This year is unlike previous years, however, because of the monumental deficit crisis facing all of us. Therefore, I am happy to join with the rest of our congressional delegation in supporting the President's request for $3.5 million for next year. We can use those funds, there is no doubt about it. However, by not asking for more we can contribute in one small way toward getting a handle on this year's budget.

I would also like to thank the committee for last year's language regarding water conservation at Prado Dam, and urge inclusion of the same or similar language in this year's appropriations bill.

In closing, I appreciate the opportunity to appear before you this morning, and urge you again to appropriate the full $3.5 million requested for the Santa Ana River project. As I did last year, I look forward to supporting the Energy and Water Development Appropriation bill on the floor. Thank you.

Mr. Myers. Thank you for your courage last year.

Mr. Dornan. I took some heat.

Mr. Myers. We do all the time.

Mrs. Boggs. Did you think about maybe building your house on pontoons?

Mr. Dornan. I criticized people in the Mississippi Valley who would build their home on a flood plain, but it is a beautiful home, and it is in the right location, and then after you own it, you start hearing talk about the 100-year and the 50-year flood, and in 1979, a series of tropical storms started to hit the southern California coast, and it was described to me as like a great train.

And when the sixth storm in a row in a period of weeks hit, everyone held their breath because that seventh storm would have generated floods which would have really damaged a lot of property in the Thirty-Eighth District of Orange County, and the adjoining Districts, and Districts to the east, so we were very lucky back in 1979, and if in God's wisdom, the series of freight train storms start to come in again, it may be this season.

Mr. Myers. Often, what is in the flood plain today wasn't there 25 years ago.

Mr. Dornan. Thank you very much.

Mr. Fazio. There is no one more devout than a convert, and we look forward to you selling our bill on the Floor.

[The statement of Mr. Hunter follows:]

DUNCAN L. HUNTER
45TH DISTRICT, CALIFORNIA

COMMITTEE ON ARMED SERVICES

SELECT COMMITTEE ON
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April 16, 1986

Honorable Tom Bevill
Chairman, Subcommittee on Energy and Water
2362 Rayburn HOB

Dear Mr. Chairman:

I'm sorry I was unable to attend the California Day hearings today, however, I wanted to make sure you had a copy of my testimony.

This project is very important to the Imperial Valley. As you probably know, the Imperial Valley is one of the largest agricultural producing areas in California. The flooding has caused get damage to the community.

I hope you will be able to support this project. If you have any questions please give me a call.

With warm regards.

Sincerely,

Duncan Hunter
Member of Congress

DH:vm

STATEMENT OF THE HONORABLE DUNCAN HUNTER

ON BEHALF OF THE IMPERIAL IRRIGATION DISTRICT FLOOD CONTROL PROJECT TO THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER

APRIL 16, 1986

Mr. Chairman and members of the subcommittee, I am pleased to be here today to express my support for a much-needed flood control project in the Imperial Valley of California.

Although Imperial County is entirely a desert region, major floods occur frequently. From the northeast, channel runoff from the Chocolate Mountains comes into the Valley. In addition, water drains off of the Laguna Mountains, to the west, onto cultivated lands. This has resulted in two storms of 100-year intensity and one flood of 25-year intensity all occuring between 1976 and 1982. In total, these floods caused a total of $32.8 million in damage. Ultimately, the water from the storms pooled in the Salton Sea.

As you might expect, this flooding causes extreme hardship to the farmers who rely on the agriculture industry in Imperial County for their families' livelihood. Over 1,600 miles of canals and auxiliary conduits bring water to 450,000 acres of farmland. Runoff from the agricultural areas is collected in a 1,400 mile drainage system that empties into the Salton Sea. The Salton Sea is the low point in the region and a natural sink. When the area is hit by a wet season it plays havoc with the irrigation and drainage system.

The Imperial Irrigation District (IID) has received judgements which indicate that the IID has the responsibility to provide flood control. The Corps of Engineers has examined the flood control problem in the Imperial Valley and has concurred that steps must be taken to implement flood control measures. Preliminary estimates indicate that nearly $1 million will be necessary to complete a study.

I would like to request that your subcommittee include $400,000 in this year's appropriation bill to begin this study on flood control in this area. Congress has already expressed an interest in the flooding in the Imperial Valley by authorizing a study in the early 1940's to identify flood mitigation possibilities along the rivers that feed the Salton Sea. No money, however, was appropriated for the study.

Again, I appreciate the opportunity to discuss this project with the subcommittee. Thank you for your time and attention.

STATEMENT OF REPRESENTATIVE CHARLES PASHAYAN, JR. BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, COMMITTEE ON APPROPRIATIONS, APRIL 16, 1986, 2362 RAYBURN

Mr. Chairman, Members of the Subcommittee, it is always an honor and a pleasure for me to appear before you relative to appropriations for vital water projects in Central California.

I am here basically to endorse the recommendations of the California Water Commission on three projects: $12,172,000 for the San Luis Unit, Central Valley Project, a Bureau of Reclamation facility, the two line item studies by the Corps of Engineers relative to the Kaweah and Tule Rivers at $100,000 each, and the $2 million appropriation for the Redbank and Fancher Creeks flood control project in the Fresno-Clovis Metropolitan area.

I should also ask the Subcommittee to consider favorably a request that an additional $500,000 be made available for advance planning and preliminary engineering design for the Bureau of Reclamation's Mid-Valley study which is a part of the San Joaquin Valley Conveyance Study.

My interest in the Caliente Creek flood control feasibility study in Kern County continues and I am pleased to join with our colleague Bill Thomas, who represents that area, in endorsing the President's $120,000 appropriation request. Both of us, as well as participants who are signatories to the cost-sharing agreement, ask that an additional $80,000 be made available to meet the $200,000 commitment of the local governments.

Thank you.

GEORGE E. BROWN, JR.
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April 16, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Energy
and Water Development
2362 Rayburn
Washington, D.C. 20515

Dear Tom:

I would like to thank you for giving me the opportunity to comment on funding needs for water projects in the State of California. Primary to concerns of many Californians must be the threat that is posed by the Santa Ana River and its tributaries in San Bernardino, Riverside and Orange Counties. I would like to focus my comments on funding for general investigation and technical studies for the Del Rosa Channel in San Bernardino.

The Del Rosa Channel is located in the City of San Bernardino, in a rapidly growing portion of my district. Homes, already established in the area, require greater flood control for long-term security, and future development will be partially dependent upon final recommendations by the Corps. By completing studies of the Del Rosa Channel in conjunction with the Santa Ana Mainstem Project General Investigation, necessary construction may begin without delays.

The President's budget calls for $50,000 to continue general investigation and technical studies for the Del Rosa Channel. I understand that this investigation could be completed in a much more timely manner if this amount were increased to $150,000. I also understand that this amount could be reprogrammed from other allocations for projects that have been delayed. This augmentation is supported by the County of San Bernardino and the California State Water Commission. I understand that the Army Corps of Engineers is in agreement that this extra funding would make it possible to complete investigation of this tributary in coordination with that of larger studies of the Santa Ana River Mainstem project.

I appreciate the work you have done to insure adequate funding for water projects nationwide and in my own home state of California. I hope that you will consider this additional funding for the Del Rosa Channel. I would appreciate your including this request in the hearing testimony. Again, I appreciate your consideration.

Sincerely,

George

George E. Brown, Jr.
Member of Congress

GEB:lb

STATEMENT OF REPRESENTATIVE BOBBI FIEDLER
BEFORE THE
HOUSE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE
COMMITTEE ON APPROPRIATIONS

WASHINGTON, D.C.

April 16, 1986

Mr. Chairman, I would like to submit this testimony for the record in support of several projects that are of vital importance to my Congressional district. At this time I would also like to thank the Chairman and the members of the Committee for their past support of water projects in the 21st District which have saved lives and millions of dollars in property.

In previous years I have supported funding for the Calleguas Creek Flood Damage Prevention study, located in Ventura county, California. Flooding from this creek caused $25 million in damage in 1980, and $39 million of damage in 1983, and in both instances the President declared Ventura County a federal disaster area. The money for the completion of this study was appropriated last year but I did want to alert the Committee of this worthwhile project which is approaching the construction phase and which was included in HR 6 the House water projects bill.

In addition, Mr. Chairman, I want to let you know of my support for the request of the United Water Conservation District for $570,000 for the Freeman Diversion Improvement Project. The Freeman project would enable the District to increase diversions of the Santa Clara River waters to help control the advance of seawater into the underground aquifers of the Oxnard plain. The Oxnard plain is the only agricultural area in the country that can support three crops per year, and a nationally significant amount of fruits and vegatables are produced in the area. If the intrusion of seawater into the aquifer is not halted, the area will be lost to agriculture-- a tragedy for the area's economy and for food prices nationally. State and local authorities have already contributed $15 million to this project and the EIS was just completed. The California Water Commission and the Ventura County Board of Supervisors also support this appropriation in the form of a PL984 loan.

I would also like to join the Port Hueneme Harbor Commission and the California Marine Affairs and Navigation Conference in supporting the inclusion of $1,020,000 in the Corps of Engineers FY87 budget to initiate and complete the widening of channel A in Port Hueneme harbor. Port Hueneme is the only deep-water port between San Francisco and Los Angeles and widening the channel would accommodate additional shipping traffic. This project is heavily supported by local jurisdictions.

I also support the appropriation of $3 million for periodic dredging of the Channel Islands Harbor by the Army Corps of Engineers. The Channel Islands harbor serves the counties of Ventura, Los Angeles, and Santa Barbara, and is a major recreational and refuge harbor.

I would also urge the Committee to support the continued funding of the Coast of California, Storm and Tidal study, at $1,500,000 for FY87. This project is supported by the Californai Marine and Navigation Conference (CMANC) and will provide important data that can be used to protect coastlines in California and other parts of the country.

To continue, I join with the Board of Supervisors of the county of Los Angeles in requesting that the Corp to use all unexpended FY86 funds appropriated for the Antelope Valley Streams study be used to pursue the study with the objective of justifying federal expenditures to construct a flood control project on the Antelope Valley stream. I would also support the allocation of a portion of the Corps planning funds to complete the study in FY87. The Antelope Valley has a history of flooding and no major urban flood control works. Rapid industrial, and residential growth and the growing importance of Edwards Air Force Base as a landing site for the Space Shuttle, underscore the need to develop an integrated plan to stop flooding in the Antelope Valley.

I also support the appropriation of $300,000 for the Point Mugu to San Pedro Breakwater Feasibility Study. Unusually strong winter storms during 1982-1983 caused extensive damage to the Los Angeles coastline and the area remains vulnerable to future storms.

Finally, I would like to affirm my support for several projects located outside of my district, which directly impact areas where large numbers of my constituents work or recreate. I support the Corp funding request of $1,150,000 for the Los Angeles County Drainage Area, and $8,900,000 for the LACDA Rehabilitation program. I also support the appropriation of $250,000 to continue the feasibility study on the North Coast of Los Angeles County project. The benefits of these programs are well known and enjoy strong local support.

I also join with my colleague, the Honorable Robert Lagomarsino in requesting $175,000 for the Ventura Marina Study, and $1,690,000 for the dredging of the Ventura Harbor.

In closing, Mr. Chairman, I want to thank you for your past support and for your consideration of these worthwhile projects.

CONGRESSMAN TONY COELHO
before the
HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
WEDNESDAY, APRIL 16, 1986

Mr. Chairman and Members of the Subcommittee:

Once again, I want to express my appreciation for your providing me with the opportunity to testify before you Subcommittee regarding the pending energy and water development projects and programs which I strongly support, which are important to the 15th Congressional District, and to the State of California.

As you are aware, the congressional district which I represent lies within the Southern portion of California's bounteous Central Valley. That Valley includes two major rivers, the Sacramento and the San Joaquin, which form the backbone of the Central Valley Project. Its initial features were authorized nearly half a century ago in the Rivers and Harbors Act of 1935. During the intervening years, with the support of your Subcommittee, the Central Valley Project has met and surpassed the vision and goals of its early promoters to provide a supply of water for agriculture, municipal, and industrial uses. This also includes projects which control flooding, reduce serious overdrafts on underground water supplies, provide an abundant water supply and environmentally clean hydroelectric power, reduce the damage caused by saltwater intrusion in the Delta, and a great variety of other benefits.

This project has been the important stimulus in the transformation of California from that of a semi-arid environment to a thriving agricultural center. The announcement by the Department of Interior to shut down irrigation drainage in to Kesterson Wildlife Refuge and then to later reach an agreement to delay closure of Kesterson until this year resulted in sending shockwaves throughout the Valley and the State. I believe it is vital that all actions be taken to find a solution to the California drainage problem. This problem must immediately be addressed in order to assure protection and maintenance of the existing agribusiness that thrives in the San Joaquin Valley.

I would like to also thank the Chairman for his guidance and leadership in taking the first step to find a solution to the drainage problem. Congress responded to the recommendation and request of a unique coalition of water and environmental interests by authorizing the Interior Secretary to make $3.7 million available for selenium research loans. Due to the efforts of many, Congress responded quickly, however, the Department has failed to implement this law and the $3.7 million has been caught in quagmire of problems. It is my hope that a solution will be found in the near future to assure the funding of these loans.

It is vital that all solutions possible to resolve the California drainage problem be fully considered in order to avert economic disaster for not only the farmers involved, but also for San Joaquin Valley agribusiness and the local communities and counties as well. In my testimony I stressed the need to update existing water projects, as well as to provide fundings to continue ongoing investigations into the development of other projects. It is for this reason, that I am submitting testimony today. I am presenting a brief summary of projects and studies which are vital to the economy and development of Central Valley water projects, and the State of California, and urge the Submittee to provide funding for these important projects and studies.

SAN LUIS UNIT
(Bureau of Reclamation)

The Administration budget includes a request of $12,172,000 to continue the San Luis Drainage investigations. I support the appropriation of these monies, and hope that they will assure the continuation of work which will ultimately provide a solution to the drainage problems faced in this area. These studies are vital elements in an ongoing coordinated program involving the federal, state and local governments and interests.

The most serious problem facing the San Luis Unit of the Central Valley Project is drainage, and I firmly believe that these studies must continue. However, I must stress that immediate action must be to find a solution to the drainage problem, and not to continue studying the issue. The agricultural drainage problems in the San Luis Unit of the Central Valley Project are critical, and as a member of the House Interior Subcommittee on Water and Power Resources, I support action of thisCommittee to begin to consider and recommend legislation which will provide authority to the Department to resolve this impending problem.

OAKDALE IRRIGATION DISTRICT
(Bureau of Reclamation)

Over the past three years, I have supported the inclusion of appropriations for the Oakdale Irrigation District for their Small Reclamation Projects loan. Again, I support the Administration's budget appropriation of $4,100,000 for this loan. This district is located in my Congressional district and will result in the continuation of the rehabilitation work on the district's main delivery and conveyance system which provides water to 58,700 acres of district land. This district has worked hard to continue to update their system, and I urge the Subcommittee's approval of this request due to the importance of this loan to the area.

SAN JOAQUIN VALLEY CONVEYANCE STUDY
(Bureau of Reclamation)

I recognize that the President's budget does not include funding to provide for the consideration of advanced planning for this project, more commonly known as the Mid-Valley Canal Project. My colleague from California, the Honorable Richard Lehman, will be fully reviewing this project in his testimony, and I support his recommendation for the funding of $500,000. This funding will provide for the financial feasibility and environmental assessment of the routing for additional conveyance of the Central Valley Project Water to the overdraftaed San Joaquin Valley. These funds will be used for advance planning and preliminary engineering design and will assure orderly development of Mid-Valley Canal project plans.

The water which would be delivered as a result of this project would be applied to lands within the service area of the Mid-Valley Water Authority. The current subsurface overdrafts in this area, part of my Congressional district, are causing serious ground subsidence problems, an alarming increase in pumping costs, and critical threats to land productivity as a result of the deteriorating water quality.

I would support the the funding of two other investigations which are not included in the President's budget. The first requested appropriation would be for $400,000 for the Delta Water Management Program. This would allow the Bureau to participate in ongoing programs in the Delta which respond to protection of water quality and wildlife, as well as to review flood protection and water transportation through the Delta. The second appropriation would provide $400,000 for the Corps of Engineers to initiate a reconnaissance level investigation to assess the long term integrity of the Sacramento River Flood Control System. As I am sure the Subcommittee is aware, California faced extreme flooding this year, and this appropriation would assist in reviewing the problems that are facing this area due to these water problems.

THE MERCED COUNTY STREAMS PROJECT
(Corps of Engineers)

This project is located in Merced County in the vicinity of the city of Merced. It will provide flood protection to residential, commercial, and agricultural lands within and adjacent to the city of Merced and Castle Air Force Base. The project area includes some of the San Joaquin Valley's richest agricultural lands, where thousands of acres of trees, vines, and irrigated pasture are threatened with flooding. During floods that occurred in January and February of 1969, about 24,000 acres were flooded, with damages of $940,000 reported. If that same flooding would happen today, damages would be over $3 million.

Approval for a new construction start was given in the Supplemental Appropriations Act for FY 1985. Advance design and engineering work is completed and the President has requested funding of $3 million for construction work and $143,000 for operations and maintenance in the FY '87 budget. I fully support this funding request and urge the subcommittee to give its approval.

REDBANK-FANCHER CREEKS FLOOD CONTROL PROJECT
(Corps of Engineers)

I continue to support the Redbank Fancher Creek flood control project in Fresno County. Congress has included the authorization for this project in H.R. 6, a bill that has passed both houses of Congress and is currently awaiting conference action. The project is located northeast of the Fresno-Clovis metropolitan area and includes the construction of three flood control detention basins on Redbank Creek, Pup Creek and Alluvial Drain; the construction of a single purpose flood control reservoir on Fancher Creek; and enlargement of the existing Big Dry Creek Dam to provide increased flood protection.

Serious flooding has occurred throughout the area covered by this project, with $4.7 million in damage caused during the floods of January-February 1969. Over 80% of the project beneefits are for urban flood control. The President has requested funding of $2 million for a new contruction start for this project in FY '87 and I fully concur in this request.

SAN JOAQUIN RIVER BASIN
(Corps of Engineers)

The San Joaquin River Basin study area is located in central California. The study is a comprehensive basin planning that addresses water resources and related problems of flood control, agricultural water supply, municipal water supply, power, recreation, fish and wildlife, and water quality. In conjunction with this effort, specific interim studies include Caliente Creek, Kaweah River, and the Tule River.

The President has requested funding of $320,000 for the continuation of the study in these various areas and I support the inclusion of these funds in this year's appropriations bill.

LOWER SAN JOAQUIN RIVER
(Corps of Engineers)

The project area includes the San Joaquin River from Friant Dam downstream to Stockton, a distance along the river of about 225 miles. There are six primary tributaries to the river including the Stanislaus, Toulumne, Merced, Chowchilla, Fresno, and Kings Rivers, with a drainage area of about 15,000 square miles. The project consists of selective channel clearing and removal of debris, including removal of sand and gravel bars, to increase channel capacity on the San Joaquin River.

The flooding that occurred in the area of the San Joaquin River during February of this year again showed the need for this project. Funds during this year will be used to complete the planning and environmental studies and recirculate the draft GDM/EIS. It is expected that actual construction work will begin next spring, so it imperative that the budget request of $1.5 million be approved. I strongly support this funding as we cannot afford to delay any longer in getting the construction work underway. I urge the subcommittee to look favorably on this request.

NEW MELONES
(Corps of Engineers)

This project provides flood protection on the lower Stanislaus and lower San Joaquin Rivers, a new irrigation supply for diversion to the local service areas and export to southern San Joaquin Valley, urgently needed power, and recreational opportunities. The project is about 97% complete. The President has requested funding of $1.9 million for construction work on this project and $593,000 for operations and maintenance. I support this request; however, I also support the addition of $3.55 million for the provision of recreational facilities in the area that has been recommended by the local New Melones task force. It is the federal government's obligation to provide these facilities and I believe this request should be included in the bill reported by the Energy and Water Appropriations Subcommittee.

I thank you for the opportunity to present my views on these important water project and ask for your continuing support in the FY '87 Appropriations bill.

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS

WITNESS

HON. MILTON MARKS, CALIFORNIA STATE SENATOR

Mr. BEVILL. Next, we will recognize Mr. Gordon Cologne who is the Chairman of the California Water Commission. Mr. Fazio tells me also Mr. Milton Marks is here, who has to catch a plane.

Mr. COLOGNE. I am Gordon Cologne, Chairman of the California Water Commission. I would like to defer to Senator Marks, who is Chairman of the Democratic Caucus in the State Legislature, and he must get back to Sacramento.

Mr. MARKS. Thank you very much, and thank you very much for letting me go ahead. I do have to catch a plane back to Sacramento tonight.

I want to thank you very much for the opportunity to testify today on the fiscal year 1987 appropriation for water resources and development.

I would like to submit additional testimony to you later on.

Mr. BEVILL. All right, Senator. We will certainly accept your additional testimony.

Mr. MARKS. Thank you.

Mr. BEVILL. We should have it by the end of the week.

Mr. MARKS. I have it. It is being prepared right now.

I am Senator Milton Marks, representing San Francisco and Marin Counties, and Chairman of the California Select Committee on Maritime Industry.

In that role, I strongly support the recommendations of the California Water Commission, including the use of existing funds which are unspent for a much-needed study of the Delta levee system so that we do not continue to have the annual winter devastation resulting from the impact of heavy rains on stressed levees.

I urge this committee to adopt the recommendations of the California Marine and Navigation Conference, because these projects are extremely important to the State's interests.

Of particular importance in my District is the San Rafael Creek navigational dredging project. Funds were appropriated last year to do half the job, which is now out to bid, and it is vital that appropriate funds to complete this project be replaced in the Corps' budget.

The San Rafael Canal supports a water-oriented business community employing some 200 people and generating significant revenue for the City of San Rafael.

The use of the Canal is much more than just recreational, and the Canal's continued navigability is essential to the survival of the business enterprises located on the Canal.

I hope that you are able to act favorably on these projects, and I thank you for your consideration.

[The statement of Senator Milton Marks follows:]

MEMBERS
SENATOR ALFRED E. ALQUIST
SENATOR ROBERT G. BEVERLY
SENATOR JOHN GARAMENDI
SENATOR BARRY KEENE
SENATOR DAN MCCORQUODALE
SENATOR NICHOLAS PETRIS

California Legislature
Senate Select Committee
on
Maritime Industry
SENATOR MILTON MARKS
CHAIRMAN

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STATEMENT BY SENATOR MILTON MARKS (D-S.F./Marin)
Before the Appropriations Subcommittee on
Energy and Water Development
April 16, 1986

Mr. Chairman and Members, thank you very much for the opportunity to testify today on the Fiscal Year 1987 appropriations for Water Resources and Development. I am Senator Milton Marks, representing San Francisco and Marin Counties, and I am Chairman of the California Senate's Committee on Maritime Industry.

In that role, I strongly support the recommendations of the California Water Commission, including the use of existing, unspent funds for a much-needed study of the Delta levee system so that we do not continue to have the annual winter devastation resulting from the impact of heavy rains on stressed levees.

Also, I urge you to adopt the recommendations of the California Marine Affairs and Navigation Conference because these projects are extremely important to the state's interests.

For example, without continued dredging of the San Francisco Harbor Bar, there can be no commercial navigational activity in San Francisco Bay. Not only would the Port of San Francisco be closed down, but five other commercial harbors inside the Bay, the tributaries leading to the Ports of Sacramento and Stockton and the private oil terminals would no longer be usable. The economic dislocations that would result are incalculable.

Your continued support for the completion of the Fisherman's Wharf Breakwater is vital to the commercial fishing industry and the shoreside businesses which depend upon a healthy fishing fleet. Additionally, working with the Wharf community, the Port of San Francisco has a commitment to revitalization of the fishing industry through the redevelopment of Pier 45. Funding from the State's Urban Waterfront Restoration Act and the California Coastal Conservancy budget also will go into the Pier 45 project. The success of that project is dependent upon completion of the Fisherman's Wharf Breakwater.

The Drift Removal O&M project for San Francisco Harbor and the Bay is important to us because of the threat to navigational safety that large floating debris poses.

Two of the California navigation, erosion and related public works projects before you for action are of particular concern to the Marin County portion of my District. One is the North Bay segment of the San Francisco Bay Shoreline study. As many of you are aware, flooding occurs with disturbing regularity every year in Marin County. The severity of flooding is such that the County usually is declared a disaster area during the winter rain season. Completion of the Feasibility Study now in progress would enable us to determine the best way to solve this problem.

While funding for the San Rafael Creek navigational dredging project was not in the President's budget last year, you approved the money to complete the first phase of this project. That phase, which includes dredging the channel across the flats leading to the Canal itself, has just gone out to bid. The budget proposal for FY 87 did not include funds for completion of the project, which would involve dredging of the inner channel which is the Canal itself.

The Canal has become dangerously shallow due to a history of flooding problems and siltation. This request is not adding a new project to the budget because the San Rafael Creek Navigational Dredging Project was authorized as an ongoing maintenance project under the Harbors and Rivers Act of 1919 and the Corps of Engineers has routinely dredged this project about every six years.

The San Rafael Canal supports many commercial uses in addition to recreation. Currently there is a healthy water-oriented business community employing some 200 people and generating significant revenue for the City of San Rafael. One firm operates a commercial freight, passenger, towing and salvage service; another does mechanical and electrical repairs on commercial and government vessels up to 90' in length and 10' in draft and also is involved in commercial towing and salvage; and four "for hire" commercial fishing enterprises also are located in the Canal. The navigability of the San Rafael Canal is essential to these and other boating industry businesses and to the continued economic health of the City of San Rafael.

I respectfully request that this Subcommittee recommend completion of the second phase of the San Rafael Creek Navigational Dredging Project and that $1 million be appropriated in the Corps budget to accomplish this.

The San Francisco Bay Area's role in world commerce and national security is expanding. Your favorable recommendation for FY 87 funding of these projects will facilitate our ability to take advantage of these opportunities and be of great benefit to the economy of the Bay Area.

I appreciate your consideration. Thank you.

Wednesday, April 16, 1986.

CALIFORNIA PROJECTS—CALIFORNIA WATER COMMISSION

WITNESSES

GORDON B. COLOGNE, CHAIRMAN, CALIFORNIA WATER COMMISSION
RAY BARSCH, GENERAL MANAGER, STATE RECLAMATION BOARD
WALLACE McCORMACK, PRESIDENT, STATE RECLAMATION BOARD
CHRISTIAN DATWYLER, ASSISTANT DEPUTY DIRECTOR, L.A. COUNTY DEPARTMENT OF PUBLIC WORKS
JOHN K. FLYNN, SUPERVISOR, VENTURA COUNTY
G.I. WILDE, GENERAL MANAGER, UNITED WATER CONSERVATION DISTRICT
LYNN MAULHARDT, DIRECTOR, UNITED WATER CONSERVATION DISTRICT
THOMAS DULLAM, PRESIDENT, UNITED WATER CONSERVATION DISTRICT
CHARLES BRYANT, PRESIDENT, ELSINORE VALLEY MUNICIPAL WATER DISTRICT
ALBERT T. HENLEY, GENERAL COUNSEL, SANTA CLARA VALLEY WATER DISTRICT
JAMES J. LENIHAN, DISTRICT FIVE BOARD OF DIRECTORS, SANTA CLARA VALLEY WATER DISTRICT
RONALD R. ESAU, ASSISTANT GENERAL MANAGER, SANTA CLARA VALLEY WATER DISTRICT
ROBERTA HUGHAN, MAYOR, CITY OF GILROY
JOHN T. O'HALLORAN, GENERAL MANAGER, SANTA CLARA VALLEY WATER DISTRICT
JAY ANDERSON, CONSULTANT, MERCED IRRIGATION DISTRICT
GEORGE OSBORNE, SANTA ANA RIVER FLOOD PROTECTION AGENCY
WALT P. ABRAHAM, SUPERVISOR, RIVERSIDE COUNTY
FRED CONTAOI, REPRESENTING THE BOARD OF SUPERVISORS, COUNTY OF SAN BERNARDINO
MICHAEL A. CATINO, MANAGER, CALIFORNIA CENTRAL VALLEYS FLOOD CONTROL ASSOCIATION
ROBERT BEACH, CHIEF ENGINEER, SONOMA COUNTY WATER AGENCY
DOUGLASS W. WILHOIT, CHAIRPERSON, BOARD OF SUPERVISORS, SAN JOAQUIN COUNTY
ALFRED B. BONNER, COUNCILPERSON, CITY OF STOCKTON
BEN AUSTIN, SUPERVISOR, KERN COUNTY
F. RICHARD LUTZ, PRESIDENT, OAKDALE IRRIGATION DISTRICT
ANDREW SCHLANGE, MANAGER, SANTA ANA WATERSHED PROJECT AUTHORITY
STANLEY MILLS, GENERAL MANAGER, RANCHO CALIFORNIA WATER DISTRICT
JOHN DeVITO, GENERAL MANAGER, CONTRA COSTA WATER DISTRICT
GEORGE McKEAN, CHAIRMAN, MID-VALLEY WATER AUTHORITY
RICHARD SCHAFER, CHAIRMAN, TECHNICAL ADVISORY COMMITTEE, MID-VALLEY WATER AUTHORITY
JEFF L. TAYLOR, SECRETARY, TECHNICAL ADVISORY COMMITTEE, MID-VALLEY WATER AUTHORITY
JIM MARKARIAN, CHAIRMAN, BOARD OF DIRECTORS, FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
LARRY M. BAGLEY, MAYOR, CITY OF OCEANSIDE

Mr. **Cologne**. Mr. Chairman, I represent the California Water Commission, and I have prepared remarks I have submitted. I ask they be incorporated in the record.

Mr. **Bevill**. Without objection, all of the prepared statements will be made part of the record. You may proceed.

Mr. **Cologne**. First, I want to thank particularly Congressman Vic Fazio for his work in helping us get this together and organized for the presentation today.

I want to thank the members of the committee for your support in the past for the California water projects. We are here today to speak favorably for all those items to the extent that they are in the budget, the President's budget. We have supported them to that extent. We are not asking for anything more than the President's budget calls for.

There are five items, however, if they can be worked in within the guidelines of that budget, we would like them included, because we feel they are very important.

First of all, as has been mentioned, the Caliente Creek in Kern County, which for some reason was a $120,000 item in there, and $80,000 more would complete that project this year, it was originally scheduled for completion this year. We don't understand why the $80,000 was eliminated in that study. We are hopeful the $80,000 could be put back in so it can be completed on time as scheduled.

Secondly, most of you are familiar with the huge storms we had last year in the northern part of the State, in the delta area particularly. Had those come about a month earlier, there would have been something in the budget for study of those levees. Those were built in the beginning of 1916, and through 1942, and have not really been analyzed since that time.

We feel that it is time now to have a comprehensive study of that project, and hope that the budget can include something for that comprehensive study.

Let me say the Corps of Engineers has indicated they have the capacity to do that work if the committee will see fit to add that item.

In addition, we are recommending the urgency of the Santa Ana River in Orange County final report be augmented by $100,000. There is $50,000 in the budget. We hope another $100,000 can be included so that final report can be done this year.

There are two items from the Bureau of Reclamation—San Joaquin Conveyance Study and the Delta Water Management Program. I want to call particular emphasis to the Delta Water Management Program.

The commission is totally in support of Congressman Miller's bill on the coordinating operations agreement. There are two aspects of it, assuming the Federal Government does get involved in that, which are very important to the total operation. One is that levee reassessment I mentioned. Second is the Delta Water Management Study.

The delta is the key to the whole water problem in the State. Unless those levees are maintained and the water quality maintained in the management program, the whole State's water program is in jeopardy. We would urge you to pay special attention to those projects.

The Water Commission is charged under California law with representing the local as well as State interests in the water programs that come before your House here. Our commission has recommended the items that are included in the President's budget.

I would like to, at this time, call on the individual members to identify themselves and make any special presentation they wish to make on those individual projects. They have indicated their desire to be brief in this respect.

[The statement of Mr. Cologne follows:]

STATEMENT OF THE
CALIFORNIA WATER COMMISSION
BEFORE THE

U. S. SENATE, COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HONORABLE MARK O. HATFIELD, CHAIRMAN

AND BEFORE THE

U. S. HOUSE OF REPRESENTATIVES, COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN

BY

GORDON B. COLOGNE
CHAIRMAN
CALIFORNIA WATER COMMISSION

APRIL 16, 1986

Mr. Chairman and members of the Committee, I am Gordon Cologne, Chairman of the California Water Commission, an official agency of the State of California. The Commission is composed of nine representative citizens from throughout the State. The Commission is charged by statute with representing State and local interests before this Committee. We have coordinated our presentation with representatives of local agencies. On behalf of the California Water Commission, I would like to express our sincere appreciation for the support this Committee has given California water resources and flood control appropriations over the years. I am privileged to appear before you with the official recommendations of the State of California for fiscal year 1986-87 appropriations.

FEDERAL-STATE COORDINATED OPERATION AGREEMENT

I would like to speak first, as we did last year, on a matter of significant importance to both federal and state interests — the coordinated operation of the Federal Central Valley Project (CVP) and the California State Water Project (SWP). Both the SWP and CVP projects divert surplus water from Delta channels and can optimize their respective shares of this water by coordinating their operations from a common pool, since the SWP has greater diversion capacity and the CVP has greater storage capacity. On May 30, 1985, the State Department of Water Resources (Department) and the U. S. Bureau of Reclamation (Bureau) executed an agreement whereby both agencies would jointly share in maintaining water quality in the Sacramento-San Joaquin Delta.

H.R. 3113 and S. 1192 would authorize the Secretary of the Interior to execute the Coordinated Operation Agreement. H.R. 3113 has been approved by the House. S. 1192 has been approved by the Senate Committee on Energy and Natural Resources.

On January 10, 1986, the Commission adopted a resolution supporting the Coordinated Operation Agreement and urging approval of legislation conforming to the provisions of H.R. 3113 without substantive amendment. We reaffirm this position.

CORPS OF ENGINEERS

We support the funding provided for the for the following projects:

Investigations, Advanced Planning, and Design

a. The proposed new study of the San Rafael Canal in Marin County to examine serious flooding problems caused by a combination of runoff and high tides in San Francisco Bay.

b. The Los Angeles County Drainage Area Review, one of the Corps of Engineers' (Corps) most urgent studies, is examining the adequacy of completed flood control channels and dams protecting densely developed portions of Los Angeles County. Increased runoff caused by the development in the watershed seriously reduces the level of protection provided by the LACDA project to the point where the existing project can no longer control a 50 year flood event.

c. The Corps' continuing examination of flooding problems along the San Francisco Bay Shoreline in Alameda, San Matec, and Santa Clara Counties.

d. The Corps' feasibility studies of the North Bay shoreline in Sonoma, Napa, and Solano Counties.

e. Investigation of the Northern California Streams, Dry Creek watershed, located in the portion of Sacramento and Placer counties where urbanization of the Sacramento metropolitan area is occurring. The communities of Roseville and Rio Linda were severaly damaged by the February 1986 floods.

f. On the Kaweah and Tule Rivers in the San Joaquin River watershed, the Corps' evaluation of the feasibility of providing additional storage for flood protection and possible increased conservation storage.

g. Interim No. III of the Santa Ana River Basin and Orange County Study, which addresses some very serious flooding problems in the rapidly urbanizing Orange County area. The communities in this basin suffered severe damage in the 1983 floods.

h. The Santa Ana River Main Stem project, for which the Corps has completed the study of upstream storage alternatives to the Mentone Dam. A report has been forwarded to the Board of Engineers for Rivers and Harbors for review. The proposed alternative is a reservoir further upstream. We are supporting use of a portion of the $3.5 million in the President's budget for design of an upstream project, when one is approved by the Board.

New Starts

Where local interests will share the cost of new construction projects, the Commission supports the new starts.

a. The Pajaro River project which will protect portions of the City of Gilroy from damaging flood flows along Uvas Creek. The plan of improvement provides for construction of a levee and utility relocations.

b. The Redbank and Fancher Creeks project in the Fresno-Clovis Metropolitan area which consists of modifications to the existing Big Dry Creek Dam, construction of the Fancher Creek Dam, and three detention basins.

c. The Fairfield Vicinity Streams project, a 1985 new start, involving channel improvements. The local cost sharing agreement is being negotiated.

d. Negotiations are also underway between the Corps, Merced County, and the State Reclamation Board on a cost sharing agreement for the Merced County Streams project. The agreement will include staging of facilities as well as cost sharing.

d. Negotiations between the Corps and Contra Costa County for the Wildcat and San Pablo Creeks project, which is nearing initiation of construction, are currently underway to develop an appropriate cost sharing agreement.

Construction

Construction funding in the FY 86-87 budget provides for continuing construction of flood control projects in California. We support these projects.

a. On the Sacramento River, Chico Landing to Red Bluff project, the State Reclamation Board intends to install a test section of bank protection at the Woodson Bridge site using the Palisades method.

b. Corte Madera Creek flows into the west side of the San Francisco Bay. Funding will allow initiation of construction of the uncompleted upper portion of the project.

c. Dry Creek (Warm Springs) Dam and Reservoir located in the Russian River watershed was heavily impacted by the February 1986 floods. Dry Creek Dam was recently completed and substantially reduced the flood damaging flows in the Russian River. Funding will allow construction of onshore recreation facilities to continue.

d. The Los Angeles County Drainage Area Rehabilitation project involves rehabilitation of the Los Angeles River channel and levees. Due to erosion, major project features have reached a point of advanced deterioration.

e. On the Lower San Joaquin River, the Corps is proceeding with selective channel clearing and removal of debris to improve the flood carrying capacity of the river.

f. Construction of the Sweetwater River flood control project in San Diego County will continue. Construction of the channel improvements is being completed in cooperation with highway construction schedules.

g. Construction will continue on the channel improvements for Walnut Creek. The project extends from the City of Walnut Creek to Suisun Bay.

h. Construction of onshore recreation facilities at New Melones reservoir will continue.

BUREAU OF RECLAMATION

We are supporting FY 86-87 funding for planning and construction programs of the Bureau of Reclamation, as follows:

a. Appropriations in FY 87 will fund the contracts to complete construction of facilities of the San Felipe Division of the CVP to convey water to Santa Clara and San Benito Counties. Supplemental water will be provided for municipal, industrial, and agricultural use.

b. The joint federal-state study of potential solutions to the irrigation drainage problems of the San Joaquin Valley west side and the San Luis Unit of the CVP, in particular, will continue. At the federal level, the study involves the U. S. Fish and Wildlife Service, Geological Survey, and Bureau of Reclamation. State agencies participating in the interagency investigations are the Departments of Water Resources and Fish and Game. David Kennedy, Director of the California Department of Water Resources, is chairing the federal-state Policy and Management Committee for these studies during 1986. He has broadened participation in this Committee to include representatives of west side San Joaquin Valley agencies.

c. The Commission is participating in the Federal-State Auburn Dam Task Force. The Task Force was recently briefed on the findings of the study by Bechtel Engineers and the analysis of these findings by federal and state agencies. Four alternatives were selected for further study:
   - —A concrete gravity dam costing $823.5 million
   - —A roller compacted concrete gravity dam costing $685.8 million
   - —A rockfill dam with concrete face estimated to cost $755.9 million
   - —A slightly smaller, compacted concrete dam a mile downstream from the other proposed alternatives, estimated to cost $594.4 million.

   On February 7, the Auburn Dam Working Group received recommendations on financing building of the project. At that meeting the Group decided the Corps should be asked to reassess the flood control benefits and the flood control alternatives for the American River. The reassessment would be made hopefully within a year. Meetings between the Corps, Bureau, and the Department are being arranged.

Small Reclamation Project Loans

The Small Reclamation Projects loan program is important to California and we believe to the entire western United States. We support funding of the loan applications in the President's budget, as described below:

a. Eastern Municipal Water District in Riverside County is constructing a distribution system to connect the District's distribution system to Metropolitan Water District's system and to existing storage at Lake Skinner and Perris Reservoir.

b. Elsinore Valley Municipal Water District is constructing levees and channels to stabilize Lake Elsinore in Riverside County.

c. Oakdale Irrigation District is converting unlined irrigation canals to concrete pipeline and installing water measuring devices.

d. Rancho California Water District in Riverside County is constructing water wells, recharge basins, and pipelines.

e. San Benito County Water Conservation and Flood Control District is constructing a pipeline distrubution system to deliver water from the San Felipe Unit of the CVP.

f. Santa Ana Watershed Project Authority is constructing pipelines, storage reservoirs, and pumping stations for municipal, industrial, and agricultural water uses.

We also support funding for two new Small Reclamation Project loans:

a. United Water Conservation District in Ventura County proposes to construct a diversion dam on the Santa Clara River, a conveyance canal, and a desilting basin.

b. San Bernardino County (Day Creek) proposes to rehabilitate and construct water conservation basins, construct a ground water spreading basin, and construct flood control channels.

Congress is considering reauthorization of the Small Reclamation Projects loan program. The Commission supports this reauthorization. Local agencies have shared in the cost of financing of projects constructed under this program. There have been no defaults on repayments of the loans. The loan program has allowed local agencies to use their initiative and creative ideas to plan and construct the projects with relatively low administrative costs.

Other Programs

a. The President's budget contains funding for the Trinity River Restoration Program. The program involves construction of the Buckhorn Mountain Debris Dam and removal of sediments from the Trinity River. The costs are shared by the State and Federal Governments. In 1985 the Commission urged that this program get underway and continues to support this program.

b. The Bureau's fish passage improvement program at the Red Bluff Diversion Dam, the Bureau's Delta Support Studies, and the Bureau's Off Stream Storage Investigation are all closely coordinated with those of the state. We support funding for these programs. The Spring Creek Toxicity Control project is a new program of the Bureau in Shasta County. The Bureau will develop, in coordination with appropriate federal and state agencies, a water management plan to reduce the adverse effects of the toxics in Spring Creek.

c. We support the new investigation of problems created by high ground water in the San Bernardino Valley. Basements are being flooded. Studies need to be made under various conditions of recharge and withdrawal. The Santa Ana Watershed Project Authority is sharing the costs of the investigation.

d. The Colorado River Board is supporting the Colorado River Salinity Control programs, the Colorado River front work and levee system, advanced planning for the All American Canal relocation, and the investigation of the Imperial Irrigation District Canal Lining and System program. We support funding for these programs.

RECOMMENDATIONS FOR REPROGRAMMING OF FUNDS

The Commission is recommending that funds be reprogrammed into the following five investigations, provided funds can be made available within the allocation in the President's FY 86-87 budget.

	President's Budget	Funds Recommended Thru Reprogramming
Corps of Engineers		
Caliente Creek	120,000	200,000
Northern California Streams Sacramento River Flood Control Interim	-	400,000
Santa Ana River and Orange County - Final Report	50,000	150,000
Bureau of Reclamation		
San Joaquin Valley Conveyance	-	500,000
Delta Water Management Program	-	400,000

Following is a brief summary of the need for reprogramming funds:

Caliente Creek -- Kern County Water Agency has executed the first cost sharing agreement for feasibility studies to be implemented in the nation. The agreement provides for an appropriation of $200,000 in FY 86-87, the second year of the investigation. The President's budget contains $120,000. The Commission is supporting an appropriation of an additional $30.000. This funding will provide for completion of the draft report in June 1987.

Northern California Streams - Sacramento River Flood Control Interim -- In February 1986, California experienced one of the most severe storms in its history. This storm was a tropical pattern spanning 2,500 miles from below the Hawaiian Islands to California. The storm brought flooding to much of Northern and Central California, prompting a Declaration of Emergency by Governor Deukmejian for 36 California counties. Runoff in Oroville and Folsom Reservoirs encroached on flood reservation space to the extent that record releases became necessary. The American and Sacramento Rivers reached their highest levels since construction of the present levee system 30 to 70 years ago.

The State Reclamation Board is reaffirming its request that the Corps initiate a reconnaissance level investigation to assess the long term integrity of the Sacramento River Flood Control System. The Board has experienced an increasing frequency of problems, such as levee subsidence, levee slips, sedimentation deposition at structures and in flood channels, and variations from flood flows. The Department of Water Resources also sees an urgent need for these studies. The Commission supports an appropriation of $400,000, as recommended by the Board and the Department.

Santa Ana River Basin and Orange County - Final Report -- This study addresses serious urban flooding problems in areas of Orange, Riverside, and San Bernardino Counties, one of the fastest growing regions in the nation. The incomplete portion of the study includes two interim studies and a final report, which will consider levees and channels on all streams not covered in the interim studies. With an additional $100,000, the final report will be completed in 1988.

San Joaquin Valley Conveyance Study -- The financial feasibility and environmental assessment of the routing for additional conveyance of the CVP water to the overdrafted San Joaquin Valley is under preparation by the Bureau. The funds for completion of the study are included in the 1986 budget. The study is a coordinated investigation between the Bureau, the Department, and the Mid-Valley Water Authority.

Legislation, S. 1898 (Wilson) and H.R. 3182 (Lehman, Coelho, Pashayan, and Thomas) has been introduced in both the Senate and House for authorization of the Mid-Valley Canal Project.

The Commission is recommending an appropriation of $500,000 to continue the Bureau's San Joaquin Valley Conveyance Project, provided the funds can be made available from existing Bureau general investigation appropriations. These funds will be used for advance planning and preliminary engineering design. The recommended $500,000 will assure orderly development of Mid-Valley Canal project plans.

Delta Water Management Program -- We have previously commented on the need for approval of the Federal-State Coordinated Operation Agreement which was negotiated by the Bureau and the Department.

In the fall of 1985, an agreement was reached by the Department, the Bureau, California Department of Fish and Game, and the Suisun Resource Conservation District on preservation of the Suisun Marsh. The agreement calls for phased construction of new facilities to protect water quality and wildlife in the marsh. Legislation to authorize the Secretary of the Interior to execute the agreement is being considered by the Congress.

The Department is negotiating with the South Delta Water Agency on an interim plan to minimize the impacts of project pumping on water levels in the sloughs from which the agency diverts water. The Department of Fish and Game is participating in the negotiations. The Corps is involved in studies with the Department on the complex flood protection and water transport problems in the Sacramento-San Joaquin Delta.

It is important that the Bureau participate in these programs in the Delta on a continuing basis. The FY 86-87 budget will not fund an appropriate level of activity. Accordingly, the Commission is recommending an appropriation of $400,000 for a Delta Water Management Program. This program will allow the Bureau to participate with the Department, Corps, Department of Fish and Game, and local agencies, in these very important ongoing programs in the Sacramento-San Joaquin Delta.

Thank you for the opportunity to submit California's recommendations.

CALIFORNIA WATER COMMISSION
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1986-87
(In Thousands of Dollars)

CWC NO.	PROJECT & COUNTY	TOTAL FEDERAL COSTS	ESTIMATED COSTS THRU 9/30/86	FUNDS AVAILABLE 1985-86	PRESIDENT'S BUDGET 1986-87	COMMISSION'S FINAL RECOMMENDATION
	CORPS OF ENGINEERS					
	GENERAL INVESTIGATIONS - SURVEYS					
3A.	Caliente Creek Kern (Kern County Water Agency will fund one half of the investigation. Commission supports reprogramming an additional $80 thousand if funds can be made available within President's budget.)	1,778	1,589	200	120	200
3B.	Dry Creek Placer, Sacramento	825	300	150	100	100
5.	Imperial Valley	-	-	-	-	-
6.	Los Angeles County Drainage Area	4,510	3,914	370	1,150	1,150
6A.	Marin County Shoreline-San Rafael Canal	260	0	-	260	260
7A.	Sacramento-San Joaquin Delta Investigation	2,900	2,168	-	250	250
7B.	Northern California Streams, Cottonwood Creek Shasta, Tehama (Funds are available for the Corps to provide analysis of flood control benefits of proposed dams.)	-	-	-	-	0

CWC NO.	PROJECT & COUNTY	TOTAL FEDERAL COSTS	ESTIMATED COSTS THRU 9/30/86	FUNDS AVAILABLE 1985-86	PRESIDENT'S BUDGET 1986-87	COMMISSION'S FINAL RECOMMENDATION
9.	Sacramento River Flood Control System Interim (The Commission supports reprogramming $400 thousand if funds can be made available within President's budget.)	-	-	-	-	400
10.	San Francisco Bay Shoreline Several	4,280	2,645			
10-2.	North Bay Interim Napa, Solano	1,005	135	280	400	400
10-3.	San Mateo-Northern Alameda Interim	1,360	585	50	440	440
11.	San Joaquin River Basin					
11-2.	Tule River	650	250	250	100	100
11-3.	Kaweah River	715	285	200	100	100
14.	Santa Ana River and Orange County Riverside, Orange, San Bernardino	9,500	7,777			
14-2.	Interim No. III Orange County Tributaries Coyote Creek, Talbert, East Garden Grove, Wintersburg, Huntington Beach, and Greenville-Banning Channels	2,178	1,015	350	550	550
14-3.	Final Report (Commission supports reprogramming an additional $100 thousand if funds can be made available within the President's budget.)	-	-	174	50	150

CWC NO.	PROJECT & COUNTY	TOTAL FEDERAL COSTS	ESTIMATED COSTS THRU 9/30/86	FUNDS AVAILABLE 1985-86	PRESIDENT'S BUDGET 1986-87	COMMISSION'S FINAL RECOMMENDATION
	GENERAL INVESTIGATIONS - CONTINUATION OF PLANNING AND ENGINEERING					
18.	Cache Creek Lake, Yolo	2,300	1,470	600	500	500
18A.	Guadalupe River Santa Clara, Alameda	1,500	265	400	750	750
21.	Santa Ana River Main Stem Several (The Commission supports using a portion of the $3.5 million for continuing planning and engineering of the upstream flood control storage facilities.)	17,300	13,025	4,000	3,500	3,500
	CONSTRUCTION - GENERAL					
25.	Corte Madera Creek Marin	14,000	8,995	600	2,000	2,000
27.	Dry Creek (Warm Springs Lake) Sonoma	343,000	293,435	11,800	11,000	11,000
27A.	Fairfield Vicinity Streams Solano	Federal 9,630 Non-Federal 11,670 Total 21,300	1,867	-	3,000	3,000
27B.	LACDA Rehabilitation Los Angeles	29,700	19,220	11,800	8,900	8,900
27D.	Lower San Joaquin River and Tributaries	5,600	3,150	2,900	1,500	1,500
28.	Merced County Streams	Federal 57,900 Non-Federal 46,100 Total 104,000	6,270	-	3,000	3,000

CWC NO.	PROJECT & COUNTY	TOTAL FEDERAL COSTS	ESTIMATED COSTS THRU 9/30/86	FUNDS AVAILABLE 1985-86	PRESIDENT'S BUDGET 1986-87	COMMISSION'S FINAL RECOMMENDATION
29.	New Melones Lake Calaveras, Tuolumne, Stanislaus	382,000	347,338	4,200	1,900	1,900
29A.	Pajaro River-Uvas Carnadero Santa Clara	Federal 1,820 Non-Federal 4,020 Total 5,840	560	-	500	500
29B.	Redbank and Fancher Creeks Fresno	Federal 55,200 Non-Federal 18,300 Total 73,500	730	700	2,000	2,000
30.	Sacramento River-Major and Minor Tributaries Several	11,900	11,551	200	200	200
31.	Sacramento River Bank Protection Several	90,000	54,846	3,500	7,000	7,000
32.	Sacramento River, Chico Landing to Red Bluff	30,000	10,895	2,500	600	600
32A.	Sacramento River Flood Control Project	74,950	69,475	250	300	300
34.	San Luis Rey River San Diego	29,700	2,024	-	-	-
35.	Santa Paula Creek Ventura (Funds not needed in FY 86-87)	36,200	4,791	-	-	-
36.	Sweetwater River San Diego	24,600	13,125	6,000	7,200	7,200
37.	Walnut Creek Contra Costa	62,800	44,176	6,000	11,100	11,100

CWC NO.	PROJECT & COUNTY	TOTAL FEDERAL COSTS	ESTIMATED COSTS THRU 9/30/86	FUNDS AVAILABLE 1985-86	PRESIDENT'S BUDGET 1986-87	COMMISSION'S FINAL RECOMMENDATION
38.	Wildcat and San Pablo Creeks Contra Costa	Federal 17,600 Non-Federal 13,300 Total 30,900	3,130	1,700	4,000	4,000
	Total Corps of Engineers				$72,470	$72,470 *
			*The Commission is supporting reprogramming an additional $580 thousand if funds can be made available within the President's budget.			
BUREAU OF RECLAMATION PROGRAMS						
41.	Sacramento River Division	352,206	301,513	5,521	1,060	1,060
47.	Auburn-Folsom South Unit	2,093,948	339,635	3,655	1,000	1,000
50.	San Luis Unit	1,261,092	496,066	15,371	12,172	12,172
	MISCELLANEOUS PROJECT FACILITIES					
60.	Trinity River Restoration Program	62,390	1,450	500	4,650	4,650
61.	Delta Support Studies Including Suisun Marsh (Budgeted $372-Miscellaneous Project Programs; $408-Operations and Maintenance; and $228-Planning)	Continuing	10,748	1,113	1,008	1,008
62.	San Felipe Division Santa Clara, San Benito	342,410	282,758	41,384	10,642	10,642
	OTHER PROJECTS					
71.	Santa Margarita (Lower Colorado Region) San Diego (Project not yet authorized)	220,866	-	-	-	-

CWC NO.	PROJECT & COUNTY	TOTAL FEDERAL COSTS	ESTIMATED COSTS THRU 9/30/86	FUNDS AVAILABLE 1985-86	PRESIDENT'S BUDGET 1986-87	COMMISSION'S FINAL RECOMMENDATION
72A.	San Benito County Water Conservation and Flood Control District	19,716	19,351	2,647	365	365
73A.	San Bernardino County (Day Creek)	13,500	-	-	1,000	1,000
73B.	Eastern Municipal Water District Riverside	25,720	21,320	4,000	1,070	1,070
74A.	Elsinore Valley MWD Riverside	25,975	500	500	1,000	1,000
75.	Oakdale Irrigation District Stanislaus, San Joaquin	17,774	13,635	5,356	4,100	4,100
76A.	United Water Conservation District Ventura	19,556	-	-	570	570
77A.	Rancho California Water District Riverside	20,940	100	100	2,533	2,533
78A.	Santa Ana Watershed Project Authority Several	14,917	4,000	4,000	8,714	8,714
	FEASIBILITY INVESTIGTIONS					
	SPECIAL INVESTIGATIONS (Mid-Pacific Region)					
79A.	Off Stream Storage	900	150	150	350	350
80.	San Joaquin Valley Conveyance Study	1,196	1,196	743	-	500
80A.	Delta Water Management Program (The Commission supports reprogramming an additional $400 thousand if funds can be made available within the President's budget.)	-	-	-	-	400

CWC NO.	PROJECT & COUNTY	TOTAL FEDERAL COSTS	ESTIMATED COSTS THRU 9/30/86	FUNDS AVAILABLE 1985-86	PRESIDENT'S BUDGET 1986-87	COMMISSION'S FINAL RECOMMENDATION
82.	Minor work in connection with completed projects	Continuing	150	150	125	125
84.	Environmental and Interagency Coordination Activities	Continuing	10,556	749	800	800
85A.	Refuge Water Supply	250	80	80	170	170
86.	Technical Assistance to States	Continuing	333	176	175	175
87.	Spring Creek Toxicity Control Study Shasta	-	-	-	20	20
	COLORADO RIVER SALINITY CONTROL PROJECT (Lower and Upper Colorado Region)					
88.	Paradox Valley Unit	84,072	22,191	1,732	12,282	12,282
89.	Grand Valley Unit	243,043	49,522	5,281	12,055	12,055
90.	Las Vegas Wash Unit	129,799	7,965	75	75	75
90A.	Lower Gunnison Basin Unit	1,563	1,463	275	100	100
91.	Colorado River Water Quality Improvement Feasibility Investigations Multi-state	58,118	45,060	5,469	3,620	3,620
91A.	Colorado River Basin Salinity Control Project - Title I ($95 thousand for work in California. Additional funds appropriated for work in other states.)	464,763	290,970	91	95	95

CWC NO.	PROJECT & COUNTY	TOTAL FEDERAL COSTS	ESTIMATED COSTS THRU 9/30/86	FUNDS AVAILABLE 1985-86	PRESIDENT'S BUDGET 1986-87	COMMISSION'S FINAL RECOMMENDATION
	OTHER PROGRAMS (Lower Colorado Region)					
94.	All American Canal Relocation Advanced Planning Imperial	930	300	300	630	630
95.	Imperial Irrigation District Canal Lining and System Improvement Investigation	486	288	200	72	72
97.	San Bernardino Ground Water Investigtion	500	-	-	150	150
98.	Colorado River Front Work & Levee System ($4.765 million for work in California Additional funds appropriated for work in other states.)	158,812	41,672	5,211	4,765	4,765
99.	Minor Work in Connection with Completed Projects	Continuing			45	45
100.	Environmental and Interagency Coordination Activities	Continuing			600	600
101.	Technical Assistance to States	Continuing			60	60
	Total Bureau of Reclamation				$86,073	$86,073 *
	Total Corps of Engineers and Bureau of Reclamation				$158,543	$158,543 **

*The Commission supports reprogramming $400 thousand for the Bureau if funds can be made available within the President's budget.

**The Commission supports reprogramming $980 thousand for Corps and Bureau if funds can be made available within the President's budget.

Mr. **Bevill**. We will be glad to hear from you.

Mr. **Fazio**. May I make a comment? I will be brief.

First of all, I would like to say that we have a great regard for Gordon Cologne in California. Mr. Lewis commented while you were over voting that he had served with Mr. Cologne. He had been a State Assemblyman, a State Senator, and as Senator was Chairman of the Senate Water Committee, and before going on the Appellate Court bench developed a great background in this area. We are optimistic about the leadership he will bring to water in California.

I might want to comment on some of the remarks he made. I think everyone on this committee is aware the Bureau's and Corps' budgets are treated relatively well in the total context of the Federal budget, given Gramm-Rudman reductions in domestic expenditures. Certainly, that is no exception as relates to California.

We have come out quite well. It is difficult, therefore, to find additional funds to add on. We have learned a great deal about the pressures on our systems during this flood year. There are some obvious things we need to look at.

It is also important to point out the disaster relief bill, which is included in the supplemental that will be on the Floor Thursday, was put together largely by Mr. Bevill and Mr. Myers and Chairman Whitten. It does not in every manner have the support of the Administration. It is rather inadequate in some areas, particularly for the Corps.

What is happening is 1986 appropriations are being used to provide for emergency funding, and we will have less accomplished, therefore, out of this year's budget, than we anticipated. So, it is very important that we look to the 1987 year and to perhaps augmenting this supplemental to meet the needs that we have.

But I have to say that, keeping in mind our overall budget problems, California will be hard-pressed to make many advances this year.

Thank you, Mr. Chairman.

Mr. **Cologne**. I think first will be Ray Barsch, speaking for our Board of Reclamation.

Mr. **Barsch**. Mr. Chairman, I am Ray Barsch, General Manager of the State Reclamation Board. I have with me Wallace McCormack, President of the Board. And I appreciate the opportunity to make the recommendations that were adopted by the Board in our March 21st, 1986 meeting.

The Board strongly urges appropriations in the amount listed in the summary for 16 projects directly related to flood control in the Central Valley. Local representatives will cover these projects in more detail. I would like to emphasize one program this year.

In February 1986, the Central Valley of California experienced one of the most severe storms in recorded history. The Sacramento River Flood Control Project, which is now somewhere between 50 and 100 years old, was severely tested, resulting in a levee failure on a project levee on the Yuba River, and this flooded thousands of homes. Certainly, several other areas were tested to near failure.

Congressman Fazio took the time to come out and view this personally in February, and he has certainly been very helpful to us in emphasizing the need for this project.

The State Reclamation Board is again requesting the Corps of Engineers be funded so they can begin this vitally needed investigation.

[The statement of Mr. Barsch follows:]

STATE OF CALIFORNIA

THE RESOURCES AGENCY

THE RECLAMATION BOARD

RECOMMENDATIONS
FEDERAL FLOOD CONTROL PROJECTS

IN THE

CALIFORNIA CENTRAL VALLEY

FISCAL YEAR 1986-87

Presented to

SENATE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
Honorable Mark Hatfield, Chairman

and

HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
Honorable Tom Bevill, Chairman

April 16, 1986

THE RECLAMATION BOARD'S RECOMMENDATIONS FOR FEDERAL FLOOD CONTROL PROJECTS

Summary

(in thousands of dollars)

Corps of Engineers' Projects	Page	Recommendations 1986-87
I. Surveys	1	
Northern California Streams	1	
-- Dry Creek	1	100
-- Sacramento River Flood Control System Interim	1	400*
Sacramento-San Joaquin Delta Investigation	2	250
San Joaquin River Basin	2	
-- Caliente Creek		200**
-- Tule River		100
-- Kaweah River		100
II. General Investigations	2	
Cache Creek Basin	2	500
III. Construction	3	
Redbank and Fancher Creeks	3	2,000
Fairfield Vicinity Streams	4	3,000
Lower San Joaquin River and Tributaries	5	1,500
Merced County Streams	5	3,000
Sacramento River and Major and Minor Tributaries	5	200
Sacramento River Bank Protection	5	7,000
Sacramento River - Chico Landing to Red Bluff Project	6	600
Sacramento River Flood Control Project	6	300
U. S. Bureau of Reclamation Projects	7	
Auburn Dam	7	1,000

* The Board supports reprogramming $400,000 if funds can be made available within the President's Budget.

** The Board supports reprogramming an additional $80,000 if funds can be made available within the President's Budget.

The Reclamation Board, as the State agency which furnishes required local assurances for federal levee and channel projects in California's Central Valley, respectfully submits this statement of support for the following projects.

While all projects are important to the health, safety, and well-being of Central Valley residents, the surveys and projects described as follows are of particular importance to The Reclamation Board.

I. Surveys

A. Northern California Streams.

This survey, authorized in 1958 and 1962, is a study of all the streams in Northern California that flow into the Pacific Ocean, including the Sacramento River and its tributaries, in regard to flood control measures.

Dry Creek

A feasibility report on Dry Creek will be completed by October 1988. Funds for this study are being shared on a 50-50 basis with Sacramento and Placer Counties. Serious flooding occurred in Roseville and Rio Linda in February 1986 emphasizing the need for flood control measures in this area. The Board recommends $100,000 to continue the feasibility study in fiscal year 1986-87.

Sacramento River Flood Control System Interim

A reconnaissance-level investigation would be initiated in fiscal year 1987. The Reclamation Board strongly recommends support for this study. The Board is concerned about the long-term integrity of the Sacramento River Flood Control System. The project is an integral part of the State's flood control plan and protects over one million people and billions of dollars in property. Portions of the project facilities are now over 100 years old, most are at least 50 years old. The Board has experienced an increasing frequency of problems, such as levee subsidence, levee slips, sediment deposition at structures and in flood channels and variations from the design flows. A break in the project levee on the Yuba River flooded thousands of homes in February 1986, and other areas within the project were seriously stressed. The Board believes it is time to consider the future of this project and the necessary measures required to sustain it as a viable, cost-effective, flood control system for the next 50 to 100 years. The Board recommends $400,000 for this study if funds can be made available within the President's Budget.

B **Sacramento-San Joaquin Delta Investigation**:

Study area is located in Sacramento, Yolo, San Joaquin, Contra Costa, and Solano Counties and extends from the southern limits of the City of Sacramento, the City of Stockton and west to Suisun Bay. Area consists of about 700,000 acres of land segregated into some 100 tracts and islands, bounded by interconnecting waterways, which are confined by 1,100 miles of levees which normally prevent the lands from being inundated by high tides or high stages. Lands within these levees are among the most productive agricultural lands in the State. The survey considers flood control, associated recreation and environmental problems, Delta water transfer and salinity intrusion problems. A critical need for levee rehabilitation throughout the Delta exists.

Current activities include coordination with the U. S. Bureau of Reclamation and State Department of Water Resources to define the scope of the needed study. In 1986, the study will continue using carryover funds. The flood control plan will be presented in the Delta Levees Feasibility Report which will be completed in September 1987. The Reclamation Board recommends $250,000 to continue this investigation.

C. **San Joaquin River Basin**.

This survey, authorized in 1964 and initiated in 1968, encompasses the southern portion of the Central Valley, including part of the Delta-Central Sierra area and all of the San Joaquin and Tulare Lake Basins. The study will investigate the problems of flood control, irrigation, municipal water supply, power, recreation, fish and wildlife, and water quality. The study area is the site of many complex water supply and water transportation problems. Flooding is a major problem in the study area. During the severe floods of 1969, 1983, and 1986, the area experienced extensive damages. Projects to be considered include: dams and reservoirs, stream diversion, bank protection, and levee and channel improvement.

The Reclamation Board recommends funding in the following amounts for fiscal year 1986-87:

Caliente Creek	-	$200,000*
Tule River	-	$100,000
Kaweah River	-	$100,000

* The Board supports reprogramming an additional $80,000 if funds can be made available within the President's Budget.

II. General Investigations

A. Cache Creek Basin:

The Corps of Engineers has completed its feasibility report regarding water resources development in the Cache Creek Basin. The report recommends enlarging the outlet channel of Clear Lake and constructing a bypass channel to reduce flooding of development around the Lake, enlarging and raising of levees around the existing settling basin near the mouth of Cache Creek to increase the Basin's sediment storage capacity, and establishing a National Wildlife Refuge in the existing Cache Creek Settling Basin at a total cost of $17,960,000.

This report states that a major flood problem exists along the rim of Clear Lake. Historical inflows to the Lake temporarily raise the lake level causing significant damage to lakefront development. Serious flood damages occurred in 1958, 1970, 1983, and 1986 causing estimated damages of $900,000, $500,000, $1,500,000, and $3,500,000, respectively. This problem can be economically solved by increasing the discharge capability of the Lake's outlet channel.

Lake County has gone on record opposing the construction of a bypass channel through the recently acquired State Park. They favor the alternative to enlarge the existing outlet channel.

Also, the storage capacity of the Cache Creek Settling Basin, which was constructed in 1937 to control sediment inflow to the Yolo Bypass of the Sacramento River Flood Control Project, is now nearly exhausted and sediment deposition from Cache Creek is again affecting the flood-carrying capacity of the Bypass and the maintenance of downstream navigation and flood control works. The Settling Basin's storage capacity would be increased and a 3,600-acre National Wildlife Refuge would be established in the Basin as a part of the National Migratory Bird Management Program.

Congress has not yet authorized this project; however, the Board recommends $500,000 for the study which will allow work to continue, which would accelerate the preconstruction planning stage when Congress authorizes the project.

III. Construction

A. Redbank and Fancher Creeks:

The Corps of Engineers has completed its feasibility report regarding water resources development on Redbank and Fancher Creeks, Fresno County. Also, the Draft of the General Design Memorandum has been completed. The report recommends single-purpose flood control improvements on Redbank, Fancher, and Pup Creeks and Alluvial Drain; and dual-purpose flood control and recreation facilities on Big Dry Creek. The plan provides for enlargement of the existing Big Dry Creek Dam and Reservoir, a new dam on Fancher Creek, and detention basins on Redbank and Pup Creeks and Alluvial Drain.

The report states that significant flood problems exist in the expanding Fresno-Clovis metropolitan area. Flooding occurs throughout the entire study area when channel capacities are exceeded. The most recent serious flooding in January and February 1969 caused an estimated $4.7 million in damages to agricultural lands, residences, and commercial and industrial properties.

The benefit to cost ratio has been improved by changing the capacities of the Fancher Creek and Redbank Creek detention basins to provide 100-year rather than 200-year level of flood protection.

Bills authorizing this project have passed both houses and are now in committee. The Board recommends $2,000,000 for this project.

B. Fairfield Vicinity Streams:

The project is located in the vicinity of the cities of Fairfield and Suisun in Solano County; the drainage basin comprises 45.8 square miles. There are five streams on which improvements are proposed. These are Ledgewood, Laurel, Union Avenue, Pennsylvania, and McCoy Creeks. The project as presented in the Corps of Engineers' Phase II GDM included channel improvements and diversion of three creeks, levees on two of the creeks, and construction of recreation facilities. After completion of the preconstruction planning studies, local interests were not in a position to provide local cooperation assurances for the project. Therefore, the Corps placed the project in a deferred status in September 1977. However, as a result of January 1982 flood damages in the project area, there has been renewed interest in the project. In April 1982, both the Cities of Fairfield and Suisun requested the Corps to reactivate the project. The Cities stated they intended to provide local assurances for a slightly modified project. Based on this support, the Corps reclassified the project to active status on June 1, 1982. In August, the State Reclamation Board indicated its willingness to provide the local cooperation assurances for the project.

The Reclamation Board recommends $3,000,000 for the Fairfield Vicinity Streams project.

C. Lower San Joaquin River and Tributaries:

The Lower San Joaquin River was authorized in 1944 and by PL 98-63, the 1983 Supplemental Appropriations Act. The existing project completed in 1968 consists of channels, levees, and riverbank revetment from Friant Dam on the San Joaquin River to Stockton, a distance along the River of about 225 miles.

The needed work includes selective channel clearing and removal of debris and bars to restore channel capacity to historic levels on the San Joaquin River. Initial work in the Eastside Bypass has been done which was identified as an emergency situation. The next phase of the work will be covered in a joint EIS-EIR, which is being prepared at this time.

The Reclamation Board recommends $1,500,000 for the San Joaquin River continuing construction project.

D. Merced County Streams:

This project, authorized in 1970, will provide flood protection for Castle Air Force Base, the City of Merced, and adjacent suburban and agricultural lands at an estimated federal cost of $73,400,000. The project is contingent upon agreement being reached on cost sharing between local, State and Federal agencies.

The Reclamation Board recommends $3,000,000 for the Merced County Streams Project.

E. Sacramento River and Major and Minor Tributaries:

Improvement of Sacramento River Major and Minor Tributaries was authorized in 1944 and further amended in 1950. This project provides for revetment for protection of bypass levee slopes against erosion. The bypass levee revetment features of the project will provide protection to flood plains adjacent to the bypasses and will decrease requirements for levee repairs under emergency conditions.

The Reclamation Board recommends $200,000 for this project.

F. Sacramento River Bank Protection:

The project, authorized in 1960, is a long-range Federal-State effort, aimed at preserving the existing project levee system of the Sacramento River. These existing levees, which offer flood protection to the Central Valley over a reach of 192 miles, are very old and subject to constant erosion. The Sacramento River Bank Protection Project work consists of sloping and placing stone protection at those points which are identified each year as the most critical. Again in the February 1986 flood, increased damage occurred which further threatens existing project levees. On this project, all costs are shared with the Federal Government paying two-thirds and the State one-third.

The Reclamation Board recommends $7,000,000 for the Sacramento River Bank Protection Project.

G. Sacramento River - Chico Landing to Red Bluff Project:

This project, authorized in 1958, comprises extension and modification of the existing Sacramento River Flood Control Project by the construction of bank protection and minor channel improvements along the Sacramento River between Chico Landing and Red Bluff.

No work was accomplished in 1985. The Board supports a continuation of the Comprehensive Plan beginning at Reach 3 (Woodson Bridge) and working downstream. Because of environmental concerns of the Board and others, work on Reaches 1 and 2 will not proceed until a reevaluation of the plan is complete, except for emergency work. The Board recommends $600,000 for continuing work necessary to reevaluate this project.

H. Sacramento River Flood Control Project:

This project was authorized in 1917 and modified by various Flood Control and/or River Harbor Acts in 1928, 1937, and 1941.

The project comprises a comprehensive system of levees, overflow weirs, drainage pumping plants, and flood bypass channels, extending along the Sacramento River from Collinsville near its mouth in Suisun Bay, upstream to Chico Landing, and along the lower reaches of principal tributaries; together with channel clearing, rectification, snagging and bank protection on the Sacramento River and tributaries.

Maintaining the stability of the project levees has been a continuing problem along Knights Landing Ridge Cut, the Colusa Basin Drain, and near the junction of Cache Slough and the Yolo Bypass. Slips in the Knights Landing Ridge Cut, Colusa Basin Drain and Cache Slough levees are recurring, and in the past PL 99 emergency levee repairs have been accomplished to restore the levee grade and section. The Knights Landing/Colusa

Drain levees protect about 100,000 acres of highly productive agricultural land, with about 2,000 people living within the area.

The Reclamation Board recommends $300,000 to continue design deficiency studies on the Sacramento River Flood Control Project.

U. S. Bureau of Reclamation Projects

Auburn Dam:

Auburn Dam, part of the Central Valley Project, was authorized in 1965. Auburn Dam and Reservoir is located on the North Fork of the American River adjacent to the City of Auburn. The dam height when constructed will be 700 feet. Auburn Reservoir will have a capacity of 2,300,000 acre-feet. The Reservoir will add 250,000 acre-feet of flood control space to the American River system.

The population centers of Sacramento, North Sacramento, Arden, Brighton, Carmichael, Fair Oaks, Folsom, and Rancho Cordova lie partially within the natural American River floodplain. The present Folsom Dam and levee system do not provide adequate flood protection against a Standard Project Flood. The part of the metropolitan Sacramento area that would be flooded by the Standard Project Flood is estimated to have a population of about 160,000 people, according to the 1980 census. Auburn Dam and Reservoir will provide additional flood protection to the population centers of the metropolitan Sacramento area.

In February 1986, flood releases from Folsom Dam exceeded the design capacity of the project levees through the City of Sacramento. It was made very clear that additional flood control measures are needed to protect the metropolitan areas.

The Reclamation Board recommends $1,000,000 for continuing planning and design activities.

Mr. **Bevill**. Very good.

Mr. **Datwyler**. I am Christian Datwyler, Assistant Deputy Director of the Department of Public Works for Los Angeles County, California.

One of the most extensive flood control and conservation systems in the nation has been built in Los Angeles County. The economy of our 8 million residents is directly dependent upon the protection of this system.

The Corps of Engineers began construction of the system in the 1930s. Unfortunately, some of its design capacity was based upon studies of population which did not anticipate the extensive development that has occurred in Los Angeles County since World War II. Actual development has been greater than anticipated, resulting in increasingly significant runoff, which the system may not be able to carry.

The Los Angeles County Drainage Area Study was undertaken to determine if the major elements of the system were adequate; if they are not, to recommend appropriate cost-effective mitigation measures to correct the identified deficiencies. Preliminary indications from the LACDA review indicate that the level of protection of some major elements may not be adequate.

We, therefore, strongly urge that Congress give high priority to funding of the LACDA study at the $1.15 million level proposed in the President's budget.

We also support the $8.9 million recommendation for LACDA rehabilitation for urgently needed maintenance and repair work.

In earlier testimony, Congressman Thomas has urged this committee to include in this report direction to the Corps of Engineers to re-focus the Antelope Valley Streams Study to identify flood studies in the Antelope Valley to be of benefit to Edwards Air Force Base and the upstream communities. We urge the Corps use the unexpended funds in this study in the current year's appropriation for the study.

[The statement of Mr. Datwyler follows:]

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

A PRESENTATION OF THE FLOOD CONTROL NEEDS IN LOS ANGELES COUNTY

FEDERAL FISCAL YEAR 1987

United States House of Representatives
Committee on Appropriations, Sub-Committee
on Energy and Water Development
Honorable Tom Bevill, Chairman

STATEMENT OF N. C. DATWYLER, ASSISTANT DEPUTY DIRECTOR, DEPARTMENT OF PUBLIC WORKS, LOS ANGELES COUNTY, CALIFORNIA.

Summary of recommendations by Los Angeles County Department of Public Works concerning the budget allocations to the U.S. Army Corps of Engineers:

1. Los Angeles County Drainage Area (LACDA) Study - We strongly support the President's budget and the California Water Commission's recommendations for an allocation of $1.15 million for continuation of the LACDA Study. Because of the seriousness of known deficiencies in major elements of our flood control system, we further urge that Congress include language in the appropriations bill for water projects that will commit funds for remedial work as soon as this study is completed.

2. Rehabilitation - Support the $8.9 million recommended Presidential budget allocation to the Corps to rehabilitate critical areas of the Los Angeles County flood control system for which it is responsible.

Mr. Chairman and Gentlemen:

One of the most extensive flood control and water conservation system in the nation has been built in Los Angeles County. The economy of the nation's second largest metropolitan area and the well-being of most of its 8.0 million residents is directly dependent on the protection afforded by this system.

Prior to the construction of the dams and flood control channels in the Los Angeles drainage basin, flooding in Los Angeles County took lives, damaged property, and interrupted commerce and trade. At times, flooding isolated the County from the rest of the nation.

The Corps of Engineers began construction of major elements of the system in the 1930s. Since the major segments were completed, it is estimated that the system has prevented $3.3 billion in potential flood damage. Unfortunately, some of its design capacity was based on studies of population projections made in the 1930's which did not anticipate the extensive development of the Los Angeles basin which occurred following World War II. Actual development has been greater than anticipated, resulting in significantly increased storm runoff which the existing system may not be able to carry.

The Los Angeles County Drainage Area Study was started in 1972 when it was realized that much more extensive urbanization had occurred than was assumed by the designers of the system. The purpose of the study is to determine if the major elements of the system are adequate, and if they are not, to recommend appropriate cost-effective mitigation measures to correct the identified deficiencies.

Preliminary indications from the LACDA review study indicate that the level of protection offered by some major existing facilities may be significantly less than originally intended. Our own experience during the wet years of 1978, 1980, and 1983 caused us to conclude that there are major deficiencies in the system. The level of protection afforded by the Los Angeles River is probably the most serious of these deficiencies. Overflow from the Los Angeles River or San Gabriel River during a major storm event could jeopardize billions of dollars worth of property and pose a threat to those who live and work in proximity to the river.

We feel it is very vital to the residents of Los Angeles County that the Corps be fully funded to complete this study expeditiously so that construction of critically needed drainage facilities can begin as soon as possible. We therefore strongly urge that Congress give high priority to the funding of the LACDA Study at the $1.15 million level proposed in the President's budget and that because of the magnitude and seriousness of the problem, include in this year's appropriation bill for water projects a commitment to fund remedial work immediately upon completion of the study.

We also support the $8.9 million recommended for LACDA rehabilitation. Urgently needed major maintenance and repair projects are required to maintain the structural integrity of the flood control system. These funds will allow completion on schedule of the 4-year $29,700,000 rehabilitation program for the Los Angeles River and other facilities constructed by the Corps of Engineers in Los Angeles County.

MSA:as
4/4/86

Mr. FLYNN. Thank you.

I am John Flynn, and I have with me Lynn Maulhardt from the Board of Directors; Herb Wilde, Manager of the District; and Tom Dullam, in the back, who is President of the District.

We are here today, Mr. Chairman, to ask the committee, and to ask you, Mr. Chairman, to bless our project with $570,000. I am not going to read all of the testimony. I have handed it in. There are 15 copies.

I urge you to include the $570,000 in the Bureau of Reclamation budget for the Public Law 984 loan.

In the United Water Conservation District, seawater intrusion is a very serious problem in our county, on the Oxnard Plain. We have formed an assessment district of local farmers and urbanites, and they have put up a goodly amount of money. We would just ask that you help us out a little bit so we can keep this project going and finally abate the seawater intrusion problem that we have.

I also, Mr. Chairman, endorse the comments of our Congressman, Mr. Lagomarsino, as they relate to the dredging of the Channel Islands Harbor and to the dredging of the Port of Wymea.

I would ask my colleague, Lynn Maulhardt, if he has comments.

[The statement of Mr. Flynn follows:]

U. S. House of Representative
Committee on Appropriations, Subcommittee on
Energy and Water Development
Honorable Tom Bevill, Chairman

U. S. Senate
Committee on Appropriations, Subcommittee on
Energy and Water Development
Honorable Mark O. Hatfield, Chairman

STATEMENT

Ventura County and Ventura County Flood Control District, California

by

Supervisor John K. Flynn
Ventura County Board of Supervisors

Project: United Water Conservation District, Ventura, California

Action Requested: Inclusion of $570,000 in the Bureau of Reclamation's Federal Budget to be Loaned to the United Water Conservation District for Construction of the Freeman Diversion Project

Honorable Tom Bevill and
Honorable Mark O. Hatfield

My name is John K. Flynn. As a member of the Ventura County Board of Supervisors, I represent the County of Ventura and the Ventura County Flood Control District.

I am appearing today to urge your inclusion of $570,000 in the Bureau of Reclamation's budget for a PL 984 loan to the United Water Conservation District for the necessary construction of the Freeman Diversion project on the Santa Clara River in Ventura County, California.

Seawater intrusion poses a serious threat to continued agricultural production in a large portion of Ventura County. The Oxnard Plain, which has been farmed since the turn of the century, depends heavily on ground water as the source of water for irrigation. Heavy use of irrigation wells has caused ground water levels to decline which, in turn, has allowed salt water from the adjacent Pacific Ocean to intrude in excess of 20 square miles of the upper aquifer under the Oxnard Plain. The immediate effect of this underflow is an inability to continue the use of wells for a water supply which, in turn, has affected the urban and agricultural communities supplied thereby.

In recognition of this problem, the Board of Supervisors of Ventura County, the United Water Conservation District, and the State of California have developed a project to increase utilization of an alternate water supply, the Santa Clara River, and to decrease pumping of water from the affected aquifer. Ordinances are in effect that prohibit further pumping from the aquifer and pipelines, terminal reservoirs, and new wells have been constructed to provide supplemental water to the area. Local and state expenditures to date approximate $15 million.

The keystone of this project is the Freeman Diversion Structure, a concrete stabilizer to be constructed in the Santa Clara River, that will allow increased amounts of water to be diverted from that river to provide users an alternative water supply through the pipelines and to recharge the ground water basin to halt and reverse the intrusion of salt water under the Oxnard Plain.

Provision of $570,000 in the Bureau of Reclamation's budget for a PL 984 loan to the United Water Conservation District will enable a start towards expeditious and economical completion of this most important project

I urge you to fund this project in the amount specified.

Thank you for allowing me to present this Statement.

GJN:jg

CHANNEL ISLANDS (CA.) HARBOR DREDGING

Presentation by Supervisor John Flynn

Ventura Co., CA.

The Channel Islands Harbor, owned by the County of Ventura, is located 60 miles north of the Los Angeles County's Marina Del Rey and 40 miles south of Santa Barbara City's harbor along the Gold Coast of California.

The Channel Islands Harbor was developed through the motivation furnished the County by the U.S. Corps of Engineers as a result of Federal studies undertaken in the late 40's. The Federal government's role was to first solve a severe beach erosion problem and, secondly, create a small craft harbor. The shoreline jetties and the offshore breakwater serve the dual role of banking laterally drifting sands and create an excellent all-weather harbor entrance. The project is one of the few projects that have exceeded the designer's expectations. The dredging of the sand bank in Channel Islands Harbor is by agreement between the Federal government under a congressional resolution signed into effect in 1959. That agreement states "The County shall provide the land and the U.S. Government shall build and maintain certain improvements within the harbor project---". This has been the statement that held in good faith to this date and with congressional support will continue.

The harbor currently houses over 2,500 boats, accommodates over 100,000 annual sport fishing visitors annually, and 20,000 annual boat launches. There currently is over $50 million in annual sales and service and the harbor has created over 1,500 jobs on County properties from shipwrights to bus boys.

The Federal government's investment in regional projects like the Channel Islands Harbor ultimately result in major benefits to the Federal government in the forms of reducing unemployment and increasing individual incomes resulting in a decrease in the Federal costs and increasing Federal revenues.

Your support to continue the maintenance dredging of Channel Islands Harbor is of major importance not only to recreation boating but to all those persons and agencies down coast from the Channel Islands Harbor including the U.S. Navy.

Mr. **Maulhardt**. No.

Mr. **Wilde**. We are in a joint agreement with the County of Ventura. I reaffirm Supervisor Flynn's statement and ask that be part of the record.

Mr. **Bryant**. I am Charles Bryant, President of the Board of Directors of the Elsinore Valley Municipal Water District.

The District is the lead agency in Lake Elsinore under the Bureau of Reclamation's Small Loan Program. On behalf of the citizens of the Elsinore Valley, I urge you to approve the $1 million written in the President's budget.

[The statement of Mr. Bryant follows:]

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United States House of Representatives
Committee on Appropriations, Sub-Committee
on Energy and Water Development
Honorable Tom Bevill, Chairman

April 16, 1986

Mr. Chairman, I am Charles Bryant, President of the Board of Directors of Elsinore Valley Municipal Water District, Lake Elsinore, California. The Water District is the lead agency for the Lake Elsinore "Lake Management Project". This approved Bureau of Reclamation Small Loans Project has been developed as a joint effort with the United States Corps of Engineers, State of California, County of Riverside and City of Lake Elsinore.

I have been requested to appear before you on behalf of the Water District and the entire area in asking your continued support by approving the $1 million which has been allocated in the '87 budget. The importance of this project to the entire Elsinore valley cannot be overstated. It will have a positive effect on the economic development, flood control and the health, safety and welfare of all the valley residents.

The City of Lake Elsinore will soon be celebrating it's 100th birthday and over that period of time the radical experience of the unmanaged lake level has been disastrous. As an example, in the late 1950's the lake completely dried up and became a dust bowl, the once prosperous valley was devastated. On the other side of the ledger, in 1980 the lake flooded causing over $70 million in damage and destruction--over 200 homes destroyed--another devastating experience.

Elsinore Valley Municipal Water District has an approved project under the Bureau of Reclamation Small Loans Program and the design of the project is progressing. It is anticipated that construction on the project will commence within approximately 18 months.

On behalf of the citizens of Elsinore Valley I support the project and urge your approval of the $1 million in the 1987 budget to complete the design of the project.

Thank you

Charles E. Bryant
President, Board of Directors
Elsinore Valley Municipal Water District

CEB:jks

Mr. **Henley**. I am Albert Henley, accompanied by Mr. James J. Lenihan. He is also a member from the district.

We support the President's programs in this regard. Therefore, I will be extremely brief.

My friend indicated I would be enthusiastic about the project. You will be pleased to learn I am not going to be. I am enthusiastic about the courtesy and attention we have always had from this committee.

I think this fiscal year may be the last year we will be asking for any sums from the committee. We have had, as I said, courtesy and attention from the committee. Let me also include the studious and knowledgeable staff.

[The statement of Mr. Henley follows:]

Santa Clara Valley Water District

5750 ALMADEN EXPRESSWAY
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TELEPHONE (408) 265-2600

STATEMENT

OF

ALBERT T. HENLEY

General Counsel

Santa Clara Valley Water District
San Jose, California

April 16, 1986

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Before the

UNITED STATES HOUSE OF REPRESENTATIVES
Committee on Appropriations
Subcommittee on Energy and Water Development
Honorable Tom Bevill, Chairman

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The Statement supports the President's FY 1986-87 Budget in the amount of $10,642,000 for completion of construction by the Bureau of Reclamation of the Santa Clara and San Benito counties phases of the San Felipe Division, Central Valley Project, California.

AN AFFIRMATIVE ACTION EMPLOYER

I am Albert Henley, an Attorney appearing for the Santa Clara Valley Water District. I am accompanied by Mr. James Lenihan, a Director of the District and for many years the District's representative on the former San Felipe Committee. The District covers the north and south Santa Clara sub-areas of the Division Service Area and is the contracting agency with the Reclamation Bureau for repayment.

BACKGROUND

The San Felipe Division of the Central Valley Project, authorized by Congress in 1967 (P.L. 90-72), will provide a supplemental water supply in Santa Clara, San Benito, Monterey and Santa Cruz counties for municipal, industrial and irrigation use. There are also recreation and fish and wildlife enhancement benefits. Construction by the Bureau of Reclamation was initiated in September, 1978, following execution of repayment contracts with the Santa Clara Valley Water District and the San Benito County Water Conservation and Flood Control District.

The project is being constructed with a capability to supply about 216,000 acre feet of water annually by the year 2020. It will provide supplemental water to 44,900 acres for irrigation, and 135,400 acre feet of water annually for municipal and industrial use, primarily in Santa Clara County.

Water from San Luis Reservoir will be transported to the service area through Pacheco Tunnel and other principal features which include 8.1 miles of tunnels, 46.9 miles of closed conduits, two large pumping plants and one terminal reservoir. The Pacheco Tunnel inlet was constructed previously under Congressional authority contained in the San Luis Unit Authorization Act.

PRIOR FUNDING

Funds were first appropriated to begin preconstruction planning in FY 1970 and for construction in FY 1975. Actual construction work began in 1978 following execution of repayment contracts. Federal allotments for the project to September 30, 1985 total $247.3 million. The allotment for FY 1986 is approximately $35.5 million.

FY 1987 FUNDING

To complete all facilities required for service under existing San Felipe Division contracts, a budget amount of $10,642,000 is required for FY 1986-87.

RECOMMENDATION

It is recommended that the President's FY 1986-87 Budget in the amount of $10,642,000 for current completion of construction for the San Felipe Division (CVP), California, be supported.

CONCLUSION

The Committee will have noticed that the President's budget proposal of $10,642,000 for FY 1987 represents what will very probably be the last request you will hear for an appropriation to continue construction of elements of the San Felipe Division of the Central Valley Project to serve the area we represent. We respectfully request your support. This part of the Bureau's work is to be completed next spring and the benefits of San Felipe will begin to flow to the lands and people of the Santa Clara and Hollister service areas. It is to be noted, as well, that repayment will begin to flow to the United States Treasury.

Mr. Chairman, I am sure you and your Members will agree that all concerned, and not least this Committee, can take profound satisfaction in the San Felipe Division. It is well conceived as an engineering measure and it has been built to date within indexed cost projections made some twenty years ago.

I will add nothing to these brief final remarks except to express personal thanks to the Committee for the courtesy and consideration we have never failed to receive at your hands.

Albert Henley

Albert Thomas Henley

Mr. Esau. I am Ronald Esau, Assistant General Manager of the Santa Clara Water District. We are the water management agency for Santa Clara County.

I have with me, to my left, Roberta Hughan, the Mayor of the City of Gilroy, who will make a couple of comments.

I would like to introduce the General Manager of our district, John O'Halloran, in the back.

I am submitting three support statements pertaining to the President's fiscal year 1987 budget in regard to work by the Corps.

First is a statement supporting the amount of $840,000 for Interims II and III of the Survey of San Francisco Bay Shoreline; second, a statement supporting the amount of $500,000 for initial construction of the Pajora River: Uvas-Carnadero Project, Santa Clara County; and third, a statement supporting the amount of $750,000 to continue design on the Guadalupe River portion of the Guadalupe River and Adjacent Streams Project.

I respectfully request that these statements be accepted for the record, Mr. Chairman. And, of course, I am also supporting on behalf of our district Mr. Henley's statement with regard to the San Felipe Division.

[The statements of Mr. Esau follow:]

Santa Clara Valley Water District

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STATEMENT

OF

RONALD R. ESAU

Assistant General Manager

Santa Clara Valley Water District
San Jose, California

April 16, 1986

- - - - - - - - - - -

Before the

United States House of Representatives
Committee on Appropriations
Subcommittee on Energy and Water Development
Honorable Tom Bevill, Chairman

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SUMMARY

The Statement supports the President's Fiscal Year 1986-87 Budget in the Amount of $840,000 for Interim II and III of the Corps of Engineers' Authorized Survey of San Francisco Bay Shoreline, California.

BACKGROUND

The Bayfront areas of many of the San Francisco Bay counties have been adversely affected by land surface subsidence and, as a result, military installations, extensive lands, thousands of homes, business establishments and industries are subject to hazardous inundation from tides of the Bay. In Santa Clara County alone, approximately 40 square miles of land surface area is adversely affected. This area houses a number of federal installations including the U. S. Naval Air Station at Moffett Field and the National Aeronautics and Space Administration's Ames Research Facility. Industrial productivity could be adversely affected by tidal flooding since defense industries such as Lockheed, and many electronics, aeronautics and space firms are located in the area. The study is essential, also, in order to permit and ensure integration of any flooding solution with protection of wetlands and wildlife refuges.

The saltwater flooding problem is particularly acute in northern Santa Clara County where the threat of flooding is an annual concern. The potential for damage grows with each year. A combination of high tides, high winds, and moderate river flows has resulted in the overtopping of the inadequate, unsound, privately-owned levee system in this area. The community of Alviso is especially vulnerable to this flood threat as evidenced by disastrous inundation in 1982 and 1983. In 1985 the Santa Clara Valley Water District completed a $1.0 million construction project which strengthened and heightened the levee west of Alviso providing limited protection to the community.

STUDY SYNOPSIS

This Corps of Engineers' survey was authorized by the 1976 Omnibus Rivers and Harbors Bill to examine the tidal flooding from San Francisco Bay. Funds were first appropriated in FY 1979 and the study has been initiated by the San Francisco District office of the U. S. Corps of Engineers. The study is being conducted in three phases with Santa Clara County and Southern Alameda counties included in Interim I. The remaining bay area counties are included in Interim II and Interim III. The San Francisco District held three broadly-based public meetings in January 1979 and also retained a consultant to define damage potentials and constraints and to assimilate the testimony requesting federal assistance given at those public hearings. Work in Fiscal Years 1983 consisted of topographic mapping, environmental and economic assessment of feasible actions. During Fiscal Year 84 and 85, the Corps continued refinement of studies leading to a targeted draft study report in September 1986. A Final Report and EIS for Interim I is scheduled for April 1987.

Funds are needed to identify the hazards from tidal inundation with an objective, scientific study. Local agencies have neither the resources nor the geographical scope to deal with this problem which affects the entire San Francisco Bay Region. Local support is very strong.

FY 1986 FUNDING

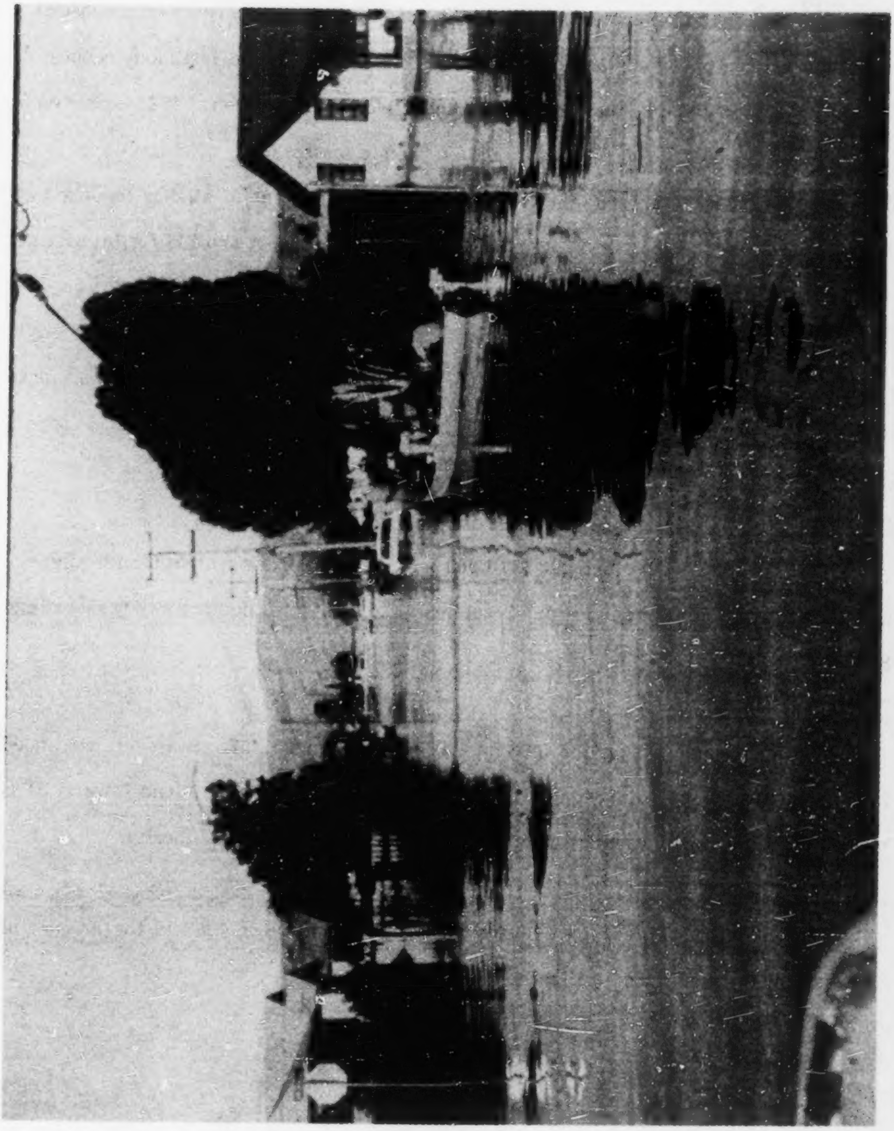
The FY 1986 budget included $470,000 for Interim I of this project (South Alameda and Santa Clara Counties only) which is sufficient to complete the Final Study report and EIS.

FY 1987 FUNDING

No additional funding for Interim I is required in FY '87. However, continued funding in the amount of $840,000 for continued work on Interim II and Interim III is needed to assure timely completion of all shoreline work under this authority.

RECOMMENDATION

We therefore urge support of the President's Budget for 1987 in the amount of $840,000 for Interim II and Interim III.



ALVISO FLOODING - 1982

Santa Clara Valley Water District

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STATEMENT

OF

RONALD R. ESAU

Assistant General Manager

Santa Clara Valley Water District
San Jose, California

April 16, 1986

- - - - - - - - - -

Before the

United States House of Representatives
Committee on Appropriations
Subcommittee on Energy and Water Development
Honorable Tom Bevill, Chairman

- - - - - - - - - -

SUMMARY

The Statement supports the President's 1986-87 Budget in the amount of $750,000 to continue design on the Guadalupe River portion of the Corps of Engineers' Guadalupe River and Adjacent Streams Project, Santa Clara County, California.

BACKGROUND

The Guadalupe River and Adjacent Streams Project and Study includes the Guadalupe River, Coyote Creek and Berryessa Creek. The Guadalupe River and Coyote Creek are the two major waterways that flow through the highly urbanized area of Santa Clara County, California. Historically, they have flooded the downtown areas of San Jose and Alviso beyond local capability to prevent. For example, on the Guadalupe River the estimated damages from a one percent or 100-year flood, which would inundate the urban center of San Jose, is $71,800,000. It is estimated that a 50-year flood on this river would cause $43,500,000 worth of damage under existing conditions. Damages on Coyote Creek would be $45 million during the 1% events to the north San Jose and Milpitas area. The probability of such floods occurring before implementation of flood prevention measures is quite high. A 50-year flood has an 18 percent chance of occurring during a 10-year period; a 100-year flood has about 10 percent chance of occurring during this same period. There is strong potential, therefore, that a damaging flood will occur before the problem can be resolved. The Guadalupe River had started to overflow its banks in April 1982 and January 1983 before the storm receded and avoided major damage. The Guadalupe River did overbank in February 1986 causing some damage to residences and business in the St. John and Pleasant Street area. Coyote Creek has caused the greater damages amounting to several million dollars, overbanking in April 1982 and again in March 1983. Hundreds of people were forced to evacuate their homes where floodwater stood for a substantial period of time.

STUDY SYNOPSIS

In 1971, the community requested the Corps of Engineers to reactivate its earlier study. The Plan of Study was completed in 1973. The initial problem definition and alternative screening was completed in 1974. More detailed problem definition and alternative studies for the Guadalupe River and Coyote Creek were completed in 1978. The third phase, study of freshwater flooding in the Baylands, was completed in 1979.

The Stage 2 report was completed for the combined Guadalupe River, Coyote Creek and Baylands. The report at that time established the financial feasibility and federal interest in the Guadalupe River. In light of recent severe flooding the Corps has now focused its study on Coyote Creek to address the inadequate level of protection provided by unstable levees. The study will also include Berryessa Creek a major tributary to Coyote Creek.

In an effort to accelerate the completion of this overall program, the local community through the Santa Clara Valley Water District has provided a substantial amount of technical and financial assistance since 1972. Special planning studies have been completed by the District for inclusion into the Corps' studies at a cost of over $430,000. To date, therefore, over $2.0 million has been expended on this study.

The recent severe flood problem and the ominous threat of future damages has forced the local community to initiate a local project on Coyote Creek in anticipation of future federal participation. Nearly $3.2 million will have been spent on the planning, design and construction of improvements on Coyote Creek by fall 1986, which are planned for incorporation into the Federal project. However, without Federal assistance needed flood protection cannot be achieved. The necessity to reduce Federal expenditures to meet economic goals is recognized. Nevertheless, projects such as the Guadalupe River and Adjacent Streams, where costly studies are complete and economic feasibility has been established, should continue to be adequately funded.

FY 1986 FUNDING

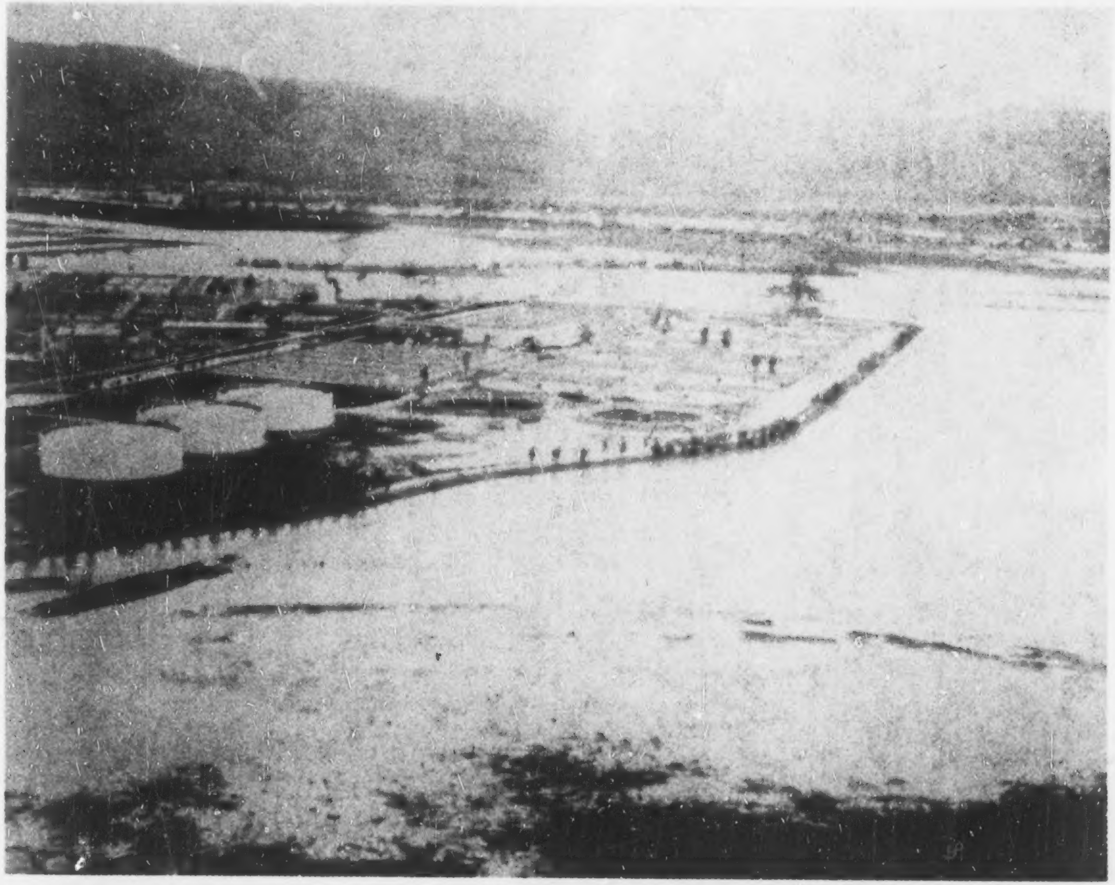
Total funding for 1986 is $400,000. $135,000 maintains the schedule necessary for completion of the Coyote Creek and Berryessa Creek Feasibility Reports and Environmental Impact Statement in early FY '87. Funding for FY '86 was determined assuming an equal local cost sharing contribution. The Guadalupe River project received $265,000 in FY '86 in the Corps' Continuing Planning and Engineering (CP&E) program.

NECESSARY FY 1987 FUNDING

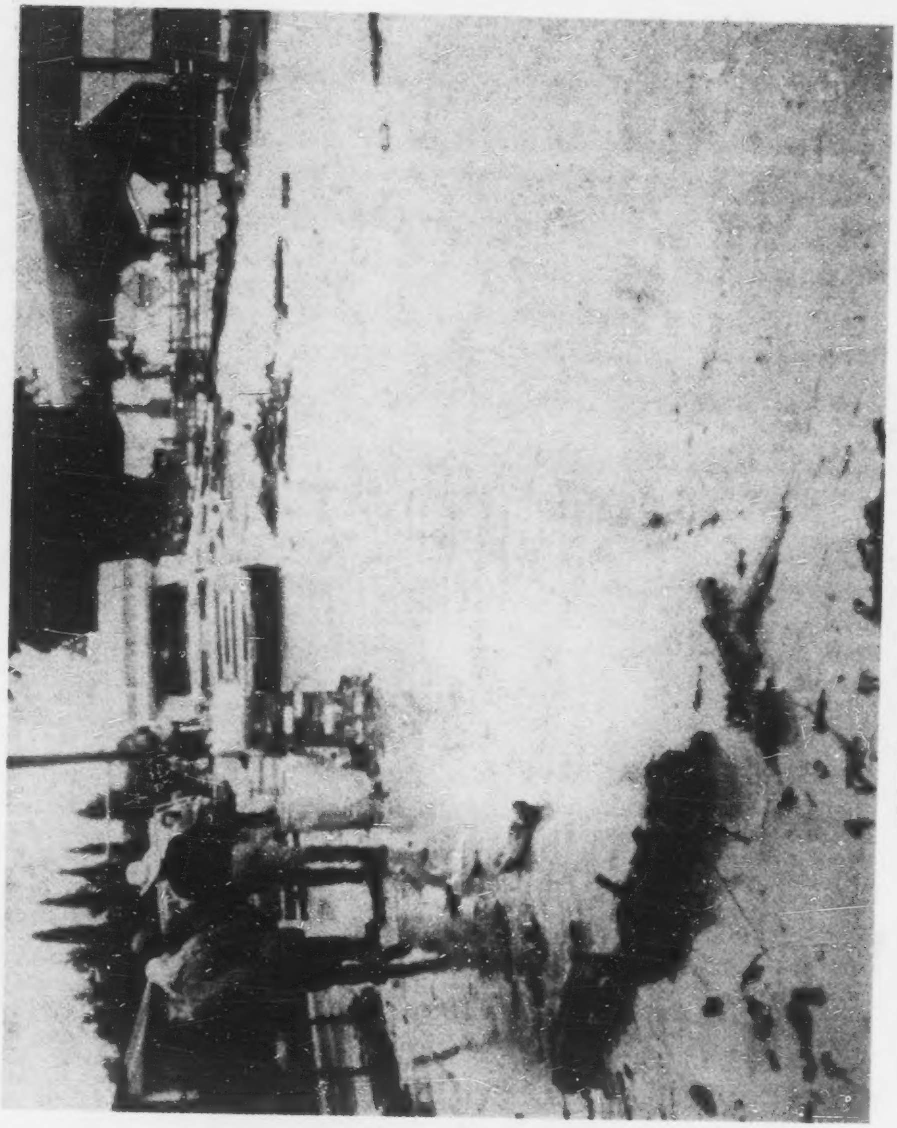
Funding for the Guadalupe River project during 1987 in the amount of $750,000 in the Corps' Continuing Planning and Engineering Program (CP&E) is essential to assure required design progress in anticipation of a future construction start as scheduled. No additional funding will be required for the completion of the Coyote and Berryessa Creek studies.

RECOMMENDATION

Based upon the present high flood risk and potential damage from the Guadalupe River, it is urgently requested that the President's 1986-87 Budget in the amount of $750,000, to continue design of the Guadalupe River Project, be supported.



COYOTE CREEK FLOODING - San Jose Water Pollution Control Plant - 3/1/83



BERRYESSA CREEK FLOODING AT OLD PIEDMONT ROAD - 1/22/83

Santa Clara Valley Water District

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STATEMENT

OF

RONALD R. ESAU

Assistant General Manager

Santa Clara Valley Water District
San Jose, California

April 16, 1986

- - - - - - - - - - -

Before the

United States House of Representatives
Committee on Appropriations
Subcommittee on Energy and Water Development
Honorable Tom Bevill, Chairman

- - - - - - - - - - -

SUMMARY

The Statement supports the President's Fiscal Year 1986-87 Budget in the amount of $500,000 for initial construction by the Corps of Engineers of the Pajaro River: Uvas-Carnadero Project, Santa Clara County, California.

BACKGROUND

The Pajaro River: Uvas-Carnadero Creek Project is located in Gilroy in the southern part of Santa Clara County, California. Congress originally authorized a levee project along Uvas Creek in 1944. Subsequently a more comprehensive effort to study the entire Pajaro River Basin was authorized by Congress in 1945. A specific report on the Uvas-Carnadero Creek portion, now to be constructed, was completed in August 1975.

The proposed project is a single levee on the northwest side of the creek to prevent flood flows from entering the southern part of the City of Gilroy. In February 1981, a public meeting was held by the Corps of Engineers in Gilroy. As a result of the firm citizen support and successful completion of pre-construction work, the Corps is proceeding with the final approval stage for the construction of the proposed project which reflects an approximate $5.4 million total project cost and a 2.3:1 benefit to cost ratio.

The January 1982 flood, though not major in magnitude, seriously threatened the City of Gilroy. Emergency actions were necessary to prevent failure of the existing levee. However, on February 17, 1986 floodwaters exceeded the banks of Uvas Creek and flowed into 200 homes and 20 businesses causing damages exceeding $5 million. Floodwaters were greater than three feet deep.

The proposed project would protect about 600 existing homes, a new high school and commercial and industrial establishments from flooding. This area is that which the City of Gilroy and the County of Santa Clara have designated for development in lieu of other areas easterly of the present city which are subject to more severe flooding and in which agricultural operations are to be preserved. The project would alleviate potential damages of $19.6 million during a 1% flood event.

STUDY SYNOPSIS

The study is now in advanced engineering and design stage, Phase II, of the General Design Memorandum (GDM). Final design is scheduled for completion in Fiscal Year 1986 with construction starting in the summer of 1987.

PRIOR FUNDING

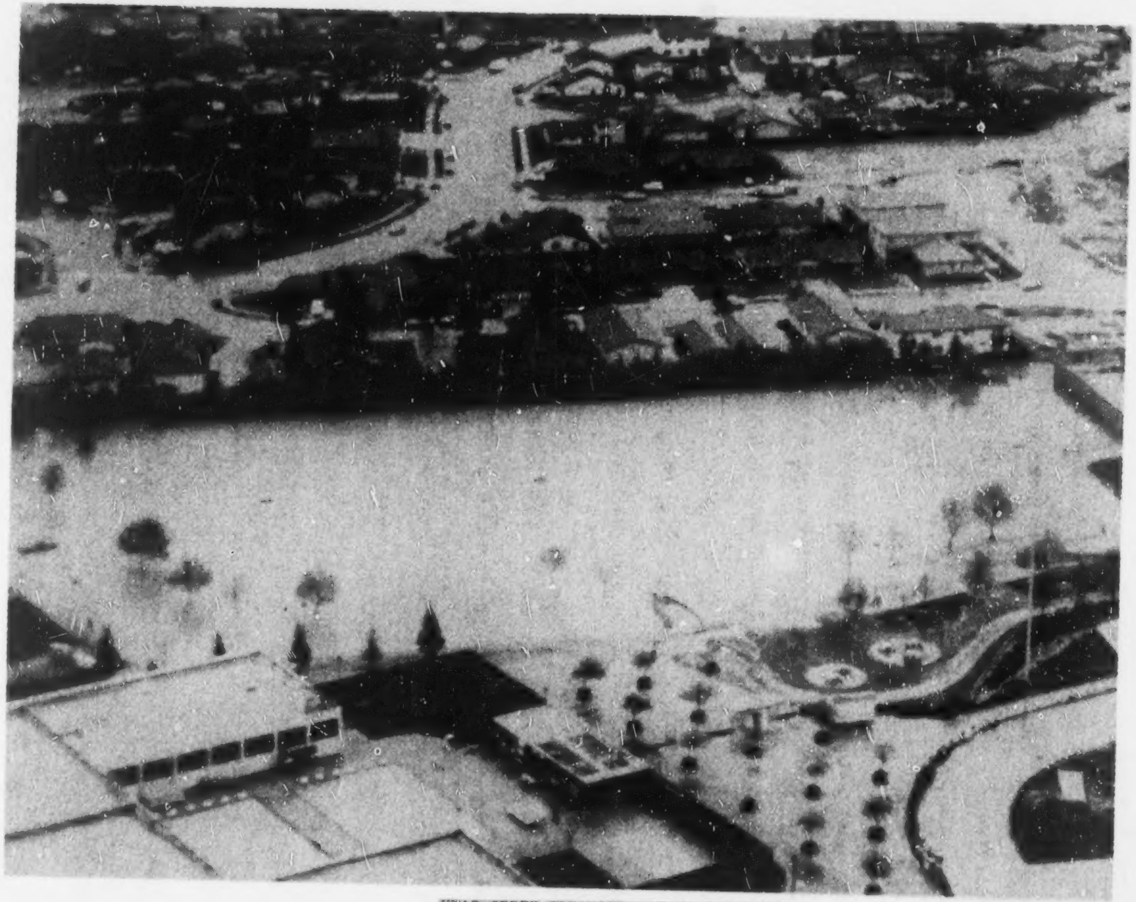
In 1983 funding was provided in the final Continuing Appropriations Bill (Energy and Water portion) in the amount of $190,000. This provided sufficient funding to carry planning and design of the project through FY 1985 and to prepare the project for construction in FY 1986. No funding was appropriated for this project in FY 86.

FY 1987 FUNDING

To accommodate construction beginning in FY 1987 the federal budget requires $500,000. Construction will be over a two-year period.

RECOMMENDATION

Community development has long contemplated completion of this critically-needed protection project. The amount of $500,000 in the President's 1987 Budget should be supported to insure construction as scheduled.



UVAS CREEK FLOODING - Feb. 18, 1986

Mr. **Bevill**. Those will be made part of the record.

Ms. **Hughan**. Mr. Chairman, members of the committee, I am from the City of Gilroy, the Mayor of the small town, and I thank you for this opportunity to come before you.

We had a flood this last year that flooded about 200 homes and made a lot of people very miserable. They go now every time it rains and stand on the edge of the creek bank and watch. You could do a great deal to alleviate their concerns if you could fund the Uvas-Carnadero Project.

[The statement of Ms. Hughan follows:]

STATEMENT

OF

ROBERTA HUGHAN, MAYOR

CITY OF GILROY
SANTA CLARA COUNTY, CALIFORNIA

April 16, 1986

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Before the

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

Honorable Tom Bevill, Chairman

SUMMARY

The Statement supports the President's Fiscal Year 1986-87 Budget in the amount of $500,000 for initial construction by the Corps of Engineers of the Pajaro River: Uvas-Carnadero Project, Santa Clara County, California.

STATEMENT OF ROBERTA HUGHAN, MAYOR

CITY OF GILROY

SANTA CLARA COUNTY, CALIFORNIA

Pajaro River Flood Control Project (Uvas Creek)

Corps of Engineers

Thank you for giving me the opportunity to speak on this important project.

The Gilroy City Council wishes to convey to you its urgent desire to have the Uvas Creek flood control project funded by Congress in 1987.

Storms in February of this year left our community with an all too unpleasant reminder of the need for this project. Over 200 homes were flooded from Uvas Creek and an estimated $5 million in flood damages were sustained to private property. The flood drew national attention.

The project has a benefit-to-cost ratio of 2.3 and has been authorized since 1944. In comparison with all flood control projects in the nation, the Uvas has one of the highest local cost-shares, being directly compatible with cost-sharing formulas under consideration by Congress. Therefore, there would appear to us to be no reason for Congress not to appropriate construction funds for this $5.4 million project.

The City of Gilroy is most anxious for favorable Congressional action on this long needed project, and strongly supports the President's Budget amount of $500,000 for FY 1986-87.

Mr. Myers. What size is the community?

Ms. Hughan. We have 25,000 people.

Mr. Myers. Do you call that a small town?

Mr. Fazio. This is California, Mr. Myers.

Mr. Myers. That is a city, in my district. Everything is big in California.

Mr. Bevill. Do the people there generally have flood insurance?

Ms. Hughan. They have flood insurance if they are in the FEMA Flood Zone. Then they are required. The rest have voluntary flood insurance. Some had it; some didn't.

Mr. Bevill. Thank you.

Mr. Anderson. Mr. Chairman, I appreciate the opportunity of representing Merced County Streams, a project started in 1958. It is ready for construction right now. We expect to sign an agreement with the Corps in the next 30 days.

We are in the budget, and I would briefly like to say we ask for your support. I would like to put my statement in the record.

I have my grandson with me.

Mr. Bevill. He is a fine-looking young man.

Mr. Anderson. If Tony Coelho decides not to run, I think he will.

[The statement of Mr. Anderson follows:]

MERCED COUNTY STREAMS

STATEMENT OF

JAY ANDERSON, SECRETARY

FOR THE MERCED COUNTY STREAMS GROUP

MERCED, CALIFORNIA

TO

UNITED STATES SENATE

COMMITTEE ON APPROPRIATIONS

SUB-COMMITTEE ON ENERGY AND WATER DEVELOPMENT

THE HONORABLE MARK O. HATFIELD, CHAIRMAN

16 April 1986

PROJECT:	MERCED COUNTY STREAMS
AGENCY:	MERCED COUNTY, CALIFORNIA
ACTION REQUESTED:	APPROVAL OF $3,000,000.00 IN THE 1986-87 BUDGET FOR A CONSTRUCTION START

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE

My name is Jay Anderson, Secretary of the Merced County Streams Group in Merced, California. I am representing the County of Merced who together with the State of California is the sponsor of the Merced County Streams Project: The County is joined by the Merced Irrigation District, the City of Merced, the El Nido Irrigation District and the Le Grand-Athlone Water District.

The plan formulated by the Corps of Engineers, Sacramento District, recommends the construction of dams on Canal and Black Rascal Creeks, the enlargement of the existing Bear Creek Dam together with improvement of approximately 34 miles of channels and levees which collectively would provide for protection to about 55,000 acres of urban and agricultural lands. A major Federal Benefit of this project is the construction of Castle Dam, on Canal Creek, which would provide protection to Castle Air Force Base, a major installation of the Strategic Air Command. Partial protection to this facility is presently provided by diverting flood waters into the canal system of the Merced Irrigation District. This practice not only damages the water distribution system but diverts the water into foreign flood plains already impacted. The City of Merced, with a population of approximately 45,000, will also greatly benefit through the reduction in the threat of flooding.

The agricultural areas subject to flooding are planted to a variety of tree, vines, and row crops and comprise some of the finest agricultural lands in the San Joaquin Valley. Less than 2% of the 1985 was under any Federal or State subsidy.

The total Federal and Non-Federal cost of the project is estimated to be $104,000,000 and is economically feasible with a favorable benefit-cost ratio. Damages are estimated to be in excess of $7,000,000 per year without construction of the project. Portions of the project area were declared a Disaster Area due to heavy flooding in 1982-83.

Initial project studies by the Corps of Engineers were started in 1958 and led to Congressional authorization in 1970. Approximately $9,000,000 has been spect on the Phase I and Phase II planning by the Corps. The project is authorized for a construction start as part of the 1985 supplemental appropriations act.

The project has the support of State and Local authorities and negotiations are presently underway between the State of California and the County of Merced to fund the Non-Federal portion of the project.

We request your Committee's support for the inclusion of $3,000,000 in the FY 86/87 budget as recommended by the California Water Commission, the Corps of Engineers, and the current administration. The allocation of this amount will allow for the orderly development of the Merced County Streams Project, which is so vital to the Community, State and the Nation.

Mrs. **Boggs**. I would like to compliment you on being here. I have watched your interest and alertness to what we have been doing.

Mr. **Anderson**. Thank you very much.

Mr. **Osborne**. I am George Osborne representing the Santa Ana Flood Protection Agency.

We support the President's budget of $3.5 million for the Santa Ana River Study.

[The statement of Mr. Osborne follows:]

Santa Ana River
Flood Protection Agency
811 North Broadway, Suite 600 Santa Ana, California - 92701 Phone (714) 834-5142

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS, SUB-COMMITTEE
ON ENERGY AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN

APRIL 16, 1986

Summary of Request:

Appropriate $3,500,000 for fiscal 1987 Continued Planning and Engineering on the Santa Ana River Main Stem Project.

I am George Osborne, Executive Director of the Santa Ana River Flood Protection Agency consisting of 22 public bodies and representing more than 2,000,000 persons in Orange County, California.

The Santa Ana River, the largest stream in Southern California, originates in the San Bernardino Mountains at elevations exceeding 10,000 feet. From the mountains the river's course lies across fertile alluvial plains to an entry into the Pacific Ocean about 70 miles from its origin. The first exploration of the area by Europeans was in 1769 and was followed by the establishment of missions and ranches on land grants from the King of Spain. Then followed the independence of Mexico, the loss of California to the United States and the admission of California as a state of the United States in 1850.

During these more than 300 years of history and for millenia before, the Santa Ana River pursued its course from the mountains to the sea sometimes as a vast, raging torrent but for much of the time as a mild, pleasant stream. History of floods is known for less than 200 years. The largest flood of record was that of 1862 and studies indicate that this event far exceeded the theoretical 100-year flood. Damage was light due to the almost undeveloped nature of the region.

In the latter part of the 19th century development in the Santa Ana River drainage area began in earnest and has continued to this time in what are now the counties of Orange, Riverside and San Bernardino.

One of the periodic Santa Ana River floods, that of March 1938, took 45 lives in Orange County. This and the attendant property damage resulted in the design and construction by the Corps of Engineers of a flood control dam on the Santa Ana River at the town of Prado for the protection of Orange County. This dam was completed in record time by 1941.

The dam has functioned well up to this time and has protected Orange County from subsequent floods, some approximating the severity of the 1938 flood.

The Corps of Engineers, however, in 1970 revealed that the project had been designed to control a flood smaller than predicted by modern hydrology aided by the use of computers. This deficiency has been confirmed by research into the history of the 1862 flood. These studies reveal that the 1862 flood was nearly twice the size as that for which the Prado project had been planned and constructed.

A remedial plan, known as the Santa Ana River Main Stem Project, has been recommended by the Corps of Engineers, the Board of Engineers for Rivers and Harbors, the Chief of Engineers and the Secretary of the Army. This project is included for authorization in H.R. 3670 and S. 1567, both of which have been passed by their respective bodies and now await reconciliation of differences in conference committee.

Currently the Corps of Engineers is pursuing continued planning and engineering and the preparation of a Phase II General Design Memorandum for the main stem project with yearly appropriations for that purpose.

The proposed budget has $3,500,000 for continuing this work in fiscal 1987. This amount will enable the Corps of Engineers to complete a draft Phase II GDM on schedule in the summer of 1988 with final approval by the Chief of Engineers in August 1989.

One of the major features of the main stem project as officially presented to the Congress is a new dam at Mentone. A restudy by the Corps of Engineers recommends substituting an Upper Santa Ana River Dam for that proposed at Mentone at a savings of $200,000,000. That study is now before the Board of Engineers for Rivers and Harbors and is expected to reach the Congress within a few months. Under these circumstances we believe that provision should be made in the appropriation permitting its use also in planning and engineering for the Upper Santa Ana River Dam as the main stem project can best be planned as a unit.

The Corps of Engineers estimates that a flood the size of that of 1862 would produce in excess of $12 billion in damages. While no one can predict when such a repetition will occur, it can confidently be said that it is only a matter of time. For this reason we support the appropriation of $3,500,000 for the Santa Ana River Main Stem Project for fiscal 1987.

Mr. **Bevill**. I notice you said that major project is in the budget.

Mr. **Osborne**. Yes, sir.

I would like very much to ask your committee to make sure that when the final language is written on this bill, that it is quite clear that the Corps of Engineers may use some of this $3.5 million for continuing the studies on the Upper Santa Ana River Dam. That is the one that takes the place of the Mentone Dam. It is very important that the whole system be studied.

Mr. **Bevill**. We will take a look at that.

Mr. **Cologne**. Walter Abraham.

Mr. **Abraham**. I am Walt Abraham, Chairman, Board of Supervisors, Riverside County Flood Control and Water Conservation District.

Riverside County sends its greetings and it thanks you.

The President's budget has included $1 million in the fiscal year 1987 budget for the Lake Elsinore Management Project, and I urge your committee to approve that amount.

Also, the President has included $3.5 million in the fiscal year 1987 budget for the Santa Ana River Project, and we urge your committee to approve that amount, to continue the engineering design of this very critical project.

Also, I urge your committee to approve the Rancho California Water District's loan.

Thank you very much for your consideration.

[The statement of Walt Abraham follows:]

SUPERVISOR WALT
ABRAHAM
FIRST DISTRICT

County of Riverside Board of Supervisors

CORA BURDICK
ADMINISTRATIVE ASSISTANT
SUE CASE
EXECUTIVE SECRETARY

STATEMENT BEFORE HOUSE AND SENATE
APPROPRIATIONS COMMITTEES
ON APRIL 16, 1986
by WALT ABRAHAM

Mr. Chairman, members of this committee, I am Walt Abraham, Chairman, Board of Supervisors, Riverside County Flood Control and Water Conservation District. I first want to speak to you on the Lake Elsinore Management Project under the Bureau of Reclamation Loan program. As you are aware from past testimony by our District, Lake Elsinore has had a history of floods and droughts, the more recent problems being of floods. Last year the Bureau of Reclamation approved a small project loan for improvements at Lake Elsinore including flood control, water development, Lake stabilization and recreation for Lake Elsinore. Your committee approved an appropriation of $500,000 last year to start engineering studies for which we are very appreciative.

In December 1985, the Army Corps of Engineers completed a feasibility study for flood control along the outflow channel from Lake Elsinore and just one month ago our Board entered into a cost sharing agreement with the Corps of Engineers to do the feasibility - design of the outflow channel. Our District is paying $180,000 of our funds for our share in this small project study.

COUNTY ADMINISTRATIVE CENTER · FOURTEENTH FLOOR · 4080 LEMON STREET · RIVERSIDE, CALIFORNIA 92501 · (714) [illegible]

It is vital that the Corps of Engineers design studies and the Lake Management design studies proceed concurrently so that the two projects get properly interfaced. In addition, the City of Lake Elsinore is moving ahead with a redevelopment project around the lake front and the outflow channel. What we have going here is a unique program involving the participation and cooperation of the Riverside County Flood Control and Water Conservation District, the Lake Elsinore Municipal Water District, the City of Lake Elsinore, the Bureau of Reclamation and the Army Corps of Engineers.

The President has included one million dollars in the Fiscal Year 1987 budget for the Lake Elsinore Management Project and I urge your committee to approve that amount.

I also want to speak briefly on the Santa Ana River project. After many years of cooperation effort and study with the Corps of Engineers and Orange, Riverside and San Bernardino Counties, we believe the Santa Ana River project may soon be authorized by Congress. The President has included 3.5 million dollars in the Fiscal Year 1987 budget for the Santa Ana River project and we urge your committee to approve that amount to continue the engineering design of this very critical project.

Thank you so much for your consideration.

Mr. Bevill. Thank you.

Mr. Contaoi. Honorable Chairman, members of the subcommittee, I am Fred Cantaoi. I have been authorized by the Board of Supervisors of the County of San Bernardino to represent them here today before your subcommittee in support of projects for flood control on the Santa Ana River.

San Bernardino County urges your subcommittee to support the critical projects in the 1986/1987 budget. Those projects are the Santa Ana River System Project, number one; the Santa Ana River and Orange County Review Final Report. Our request on this item includes the reprogramming of $100,000 to complete the report in 1988. And the final project is the Bureau of Reclamation for water conservation on the Dade Creek System.

We respectfully ask that your subcommittee assist in supporting appropriations for the projects to Congress.

San Bernardino County appreciates the opportunity to be here today.

Mr. Bevill. Michael Catino.

Mr. Catino. I am Michael Catino, representing the California Central Valleys Flood Control Association.

Mr. Chairman, I would like to bring to your attention the moment you and I had over five years ago with former Congressman Biz Johnson. We made an instrument landing on a little strip in Marysville, California. I would like to point out to you that right over the road from that strip and up a piece were the little communities of Linda and Olivers. That is where a levee broke in Reclamation District 784. 26,000 people had to be evacuated.

Now, Mr. Fazio has done a super job out in California making a study, an appraisal of the necessary funding that is needed out there. But I recommend to your committee that you bring in the Corps of Engineers with some up-to-date estimates as to the needs in California on flood work.

For example, all we are doing at Linda, California—the Corps of Engineers has put a plug in that river until a permanent position can be made in fixing that levee. The same thing is true north of the Sacramento Metropolitan Airport on Sandy Road, which is Reclamation District 1,000—put a plug in the Sacramento River.

I have learned in the last week about 2,300 feet of permanent replacement has to be done. I give you that as a couple of examples.

I am here to endorse the presentation from the State Reclamation Board to continue with a study that is long overdue, a reappraisal of the design capacities of the Sacramento, the American River, and the Feather River. In other words, the design characteristics today would very much put in doubt the American River can handle a 115,000 second feet, although 100,000 second feet was put down the river for a short time. The same thing is true in the delta areas.

One area not included in the budget is Cottonwood Creek in the northern part of the State. This represents one of the major unabated streams in Northern California to add to the flow in the Sacramento River and the problems in the delta. That is on the flood control side.

On the Bureau of Reclamation side, we endorse the statements that have been made here on the Delta Water Management Study, and we also endorse the statements made on the San Joaquin Conveyance Study.

There are two other areas that are of high interest to the Central Valley Project Water Association. One is Auburn-Folsom Dam. We are not asking that you start commencement of construction tomorrow, but we lost—you are part of the government—lost a $10 million to $11 million cofferdam there. That will have to have a sheer plane on it from a safety point. That will be taken down a number of yards deposited in the river and cleaned up.

What I can apprise from the Bureau of Reclamation is they would need for the clean-up and keep maintenance on the Auburn-Folsom South Unit in the neighborhood of $8 million spanning over two years.

I think the Bureau of Reclamation ought to come before you, sir, and tell you what their needs in the Kesterson area are. They have a number of studies going on with various universities and individuals. It is very hard for us as a water association to get a real handle on that, as to their specific needs.

We endorse whatever needs they feel appropriate over and above the President's budget.

[The statement of Mr. Catino follows:]

CALIFORNIA CENTRAL VALLEYS FLOOD CONTROL ASSOCIATION
703 ELKS BUILDING, 921 - 11th STREET, SACRAMENTO, CALIFORNIA 95814
TELEPHONE (916) 446-0197

GEORGE C. (TIM) WILSON, *President*
CHARLES H. MICHAEL, *Vice President*
ALBERT S. WALTON, *Treasurer*
MICHAEL A. CATINO, *Manager*

April 8, 1986

STATEMENT
OF
MICHAEL A. CATINO
Manager

CALIFORNIA CENTRAL VALLEYS FLOOD CONTROL ASSOCIATION
Sacramento, California

April 16, 1986

Before the

U. S. Senate, Committee on Appropriations
Subcommittee on Energy and Water Development (Public Works)
Honorable Mark O. Hatfield, Chairman

and Before the

U. S. House of Representatives, Committee on Appropriations
Subcommittee on Energy and Water Development
Honorable Tom Bevill, Chairman

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RICHARD D. WILLEY, *Sacramento*
GEORGE C. WILSON, *Walnut Grove*

Mr. Chairman and Members of the Committee: I am Michael Catino, Manager of the California Central Valleys Flood Control Association (CCVFCA) and we appreciate the opportunity to come before you to present our recommendations for fiscal year 1987 appropriations.

The Association, which I represent, was organized in 1926, prior to any major State or Federal water and energy projects, and since that date has been a proponent of all of these developments in California. Seventy-five Reclamation, Levee Maintenance, and Flood Control Districts comprise its membership, located south from Red Bluff, California to Manteca, California, and containing 900,000 acres along the Sacramento and San Joaquin Rivers and Delta areas.

In February of this year, Northern California suffered another devastating flood period. The Sacramento Valley and Delta area levees have sustained extreme damages. While losses of life were very minimal due to the immediate action of local, State and Federal agencies. Property damages are higher than in previous flood periods. For restoration of facilities that guard against the elements significant funding will be required. It is well to point out that work done to date is mostly in the "flood fighting" category. Permanent restoration will be the goal of all agencies in the future. The President's budget for FY 1987 prepared near the first of the year, will need to be augmented to accommodate a rehabilitation work program. Estimates are not readily available to this Agency to fully present the scope of the construction work. It is recommended that those concerned agencies be provided a revised budget in conformance with their surveyed needs and capabilities.

Separately, we recommend augmentation of the President's FY 1987 budget for the following:

CORPS OF ENGINEERS

General Investigations

Sacramento River Flood Control System - Interim

President's FY 1987 budget	$ 0
CCVFCA Recommendation	400,000

This Association is concerned with the capability of the current river system to equal its design values. Many of the protection levees are approaching 100 years of life and others are 50 years old. The levees have subsided in many areas along with sediment deposition in the streambeds. It is doubtful that the water carrying and diversion facilities are meeting their design characteristics.

We join with the State Reclamation Board in the immediate review of the Sacramento River Flood Control System and separately support the study of the American River System since its capabilities are questionable in view of this years' increased sedimentation and erosion.

Northern California Streams
Cottonwood Creek

President's FY 1987 budget	$ 0
CCVFCA Recommendation	200,000

Cottonwood Creek remains as one of the most unabated streams flowing into the Sacramento River and generally adds to the Valley's flood control problems. Studies have continued for many years to a point where construction could commence if suitable cost-sharing arrangements can be accomplished between the State and Federal Agencies. In view of the flood damages of 1986, sufficient funding should be obtained to ascertain revised values and continuing negotiations for ultimate construction.

SUMMARY

This Statement supports augmentation of the President's FY 1987 budget as follows:

	President's Budget	CCVFCA Recommendation
CORPS OF ENGINEERS		
Sacramento River Flood Control System - Interim	$ 0	$400,000
Northern California Streams - Cottonwood Creek	0	200,000

We support the President's FY 1987 budget for the following program items:

CORPS OF ENGINEERS

General Investigations - Surveys	
Dry Creek	$ 100,000
Sacramento-San Joaquin Delta	250,000
Cache Creek	500,000
Construction - General	
Lower San Joaquin River and Tributaries	1,500,000
Sacramento River - Major and Minor Tributaries	200,000
Sacramento River Bank Protection	7,000,000
Sacramento River, Chico Landing to Red Bluff	600,000
Sacramento River Flood Control Project	300,000

Mr. **Bevill**. Your statement brings out the point that as long as we have these devastating floods that you refer to there, and the drought in other parts of the country, this committee's work is cut out for us.

Mr. **Catino**. Yes, sir.

It is always a pleasure to see you, sir.

Mr. **Bevill**. Good to see you again. I remember so well Biz and I were flying over those mountains in the Oregon mine there. I found myself trying to help that plane get over those mountains.

Mr. **Fazio**. Mr. Chairman, I would also like to thank you for making that trip, because I had a fund raiser in Marysville about halfway through it. It was nice of you and Biz to drop in on me at that time.

I also want to say to Mike Catino how much we appreciate what he has done and what he continues to do. He was the Regional Commissioner of the Bureau for many years; worked with Biz Johnson on some of the things in place.

I agree the issue has to be resolved. I hope working together that we can come up with, perhaps in an 18-month time frame, some sort of resolution as to what kind of dam we want to build. At that point, the committees of authorization on it have the opportunity to make the choice. I know this committee will help us get to that point.

Mr. **Catino**. Thank you, sir.

Mr. **Beach**. Mr. Chairman, members of the subcommittee, I am Robert Beach, General Manager of the Sonoma County Water Agency. I am here this morning to urge the subcommittee to support the President's request for the Warm Springs Dam/Lake Sonoma Project.

Thank you for your past support for this project.

[The statement of Mr. Beach follows:]

Statement of
Robert F. Beach, General Manager
Sonoma County Water Agency

presented to

U. S. HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY & WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN

in support of appropriation for

WARM SPRINGS DAM - LAKE SONOMA PROJECT

April 16, 1986

Mr. Chairman and Members of the Subcommittee -- I am Robert F. Beach, General Manager of the Sonoma County Water Agency (State of California). We urge that the subcommittee support the request for $11.0 million included in President Reagan's proposed budget for the Warm Springs Dam - Lake Sonoma Project in Sonoma County, California.

For the past twenty-five years we have annually represented to you our support for the Warm Springs Dam Project. We have recounted floods and droughts and described the benefits that would flow from the completion of this project. That day is now at hand. The U. S. Army Corps of Engineers closed the outlet works gates and began deliberate impoundment of water one year ago last November. During the massive rainstorms that swept Northern California in February, the project demonstrated its flood control value by reducing what was nevertheless a record flood stage in the lower Russian River by five feet, preventing enormous additional damage.

The construction work planned for next year consists primarily of completion of a minimal recreation plan. The proposed recreation facilities included in the minimal recreation plan are only a fraction of those contemplated in the Lake Sonoma Master Plan. The prospect of these basic recreational facilities was clearly a major consideration in the decision to sponsor the project and in the subsequent referenda supporting the Warm Springs Dam Project. Failure to complete these facilities as proposed in the budget request would place the County of Sonoma in a most difficult position.

Between the Corps and the County, many millions of dollars have been spent to improve, realign or construct approximately 38 miles of road to and on the Warm Springs Dam recreational site. These roads provide excellent access to all parts of the lake. The availability of water and open public land will create a major attraction with excellent access within a short drive from most of the highly urbanized San Francisco Bay Area. The County currently can visualize no effective means of controlling this access. Consequently, major problems can be anticipated for the County that would result from the failure of the Corps and the federal government to fulfill previous understandings and obligations to provide satisfactory organized recreational facilities designed to accommodate the anticipated visitor traffic. A partial list of expected problems would include:

1. Inability to control individuals from entering undeveloped areas resulting in inappropriate camping, fishing and hunting, poor sanitation, high fire danger, and difficult evacuation in the event of illness or injury;
2. Environmental degradation of the area because of potential foot, animal, or vehicle traffic in areas not appropriately improved to handle this access;
3. Substantial and costly law enforcement requirements to attempt to control traffic and access to the area.

We appreciate the support the Warm Springs Dam Project has received from this subcommittee over the years and look forward with great anticipation to the full realization of the flood control, water supply and recreational benefits of the project.

Mr. WILHOIT. I am Douglass Wilhoit, Chairman of the San Joaquin County Board of Supervisors. It is an honor to be before you this morning.

We have a delegation traveling back, including Tom Castels. Our statement is part of the record. Naturally, we are in full support of that statement.

I would like to thank Congressman Shumway and Congressman Lehman for the fine statement—of highlighting that statement. I would like to add to the accolades our heart-felt thanks for your support and consideration over the years. We look forward with optimistic anticipation to the continued support in this 1986-1987 fiscal year.

Thank you very much.

[The statement of the San Joaquin Board of Supervisors follows:]

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN

STATEMENT
On Behalf Of
THE COUNTY OF SAN JOAQUIN
and the
SAN JOAQUIN COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT,
CALIFORNIA

April 16, 1986

Mr. Chairman and Members of the Committee:

My name is George L. Barber. I am Vice-Chairman of the Board of Supervisors of the County of San Joaquin, California. A resolution of the Board authorizing this presentation is attached.

In summary, the County of San Joaquin requests that the following appropriations be made to the Corps of Engineers and the Bureau of Reclamation for the fiscal year between October 1, 1986, and September 30, 1987, for projects of concern to the County:

Corps of Engineers - Construction	
New Melones Project	$ 1,900,000
Lower San Joaquin River Clearing and Snagging	$ 1,500,000
San Francisco Bay to Stockton Ship Channel Deepening	$ 5,000,000
Corps of Engineers - Investigations	
Sacramento-San Joaquin Delta Investigation	$ 250,000
Bureau of Reclamation - Construction	
Auburn-Folsom South Unit	$ 1,000,000
Bureau of Reclamation - Loan Program	
Oakdale Irrigation District Loan	$ 4,100,000
Bureau of Reclamation - Investigations	
Delta Support Studies	$ 1,008,000

DETAILED COMMENTS

Corps of Engineers - Construction

New Melones Project	$1,900,000

The New Melones Dam, Reservoir, and Power Plant are complete for operational purposes and all State permits necessary to permit full, authorized operation are in the Bureau's hands. The project has provided tremendous flood control benefits during the spring of 1986. Water quality, fishery, and power benefits and irrigation benefits were also available in recent years. These benefits are assured for the future.

The President's budget provides $1,900,000 for completion of remaining facilities and requirements of the project. We believe that this project should be completed so that it can serve all its authorized purposes and can maximize its benefits.

Lower San Joaquin River Clearing and Snagging	$1,500,000

Much of the Lower San Joaquin River channel upstream of Mossdale has become choked with sediment and debris as a result of upstream erosion and past floods. It is essential to continue this channel clearing program on the river system so that it can carry its design flood flows without endangering adjacent properties. We support the funds included in the President's budget for this essential work.

San Francisco Bay to Stockton Ship Channel Deepening	$5,000,000

The President's budget includes $3,900,000 for deepening of the San Francisco to Stockton Ship Channel to 35 feet. We urge that the budgeted amount be increased to $5,000,000 so that the entire project, including channel realignment, can be completed in fiscal year 1986-87.

Corps of Engineers - Investigations

Sacramento-San Joaquin Delta Investigation	$ 250,000

This study is to determine how the levees within the Sacramento-San Joaquin Delta can be rehabilitated to assure stability and provide seepage control. These levees provide protection to many fertile acres of farm land and adjacent communities. They also provide waterways that are used extensively for boating and recreation. Some of the levees are essential in limiting the tidal effects which cause salt water intrusion into the Delta channels. It is essential that these studies be undertaken and we support the funds included in the President's budget for these studies.

Bureau of Reclamation - Construction

Auburn-Folsom South Unit........................$1,000,000

The President's budget contains $1,000,000 for work in fiscal year 1986-87. Recent information made available regarding the cost of the construction of Auburn Dam is under review for the Federal-State Task Force. A specific recommendation regarding the construction of Auburn Dam should be available within the next few months and the Bureau of Reclamation will need to proceed with studies required to modify its design in accordance with this recommendation. Water supplies which can be made available by Auburn Dam and Reservoir are essential to the resolution of the minimum flow problems in the Lower American River and to provide water for use in the Folsom South Canal service area.

The most important program of the Auburn-South Unit is the Folsom South Canal, which now ends 10 miles north of the San Joaquin County line. San Joaquin County, through its Flood Control and Water Conservation District, completed a comprehensive groundwater management study of the portion of the County that would be served water from the canal. This study has provided the County with useful information on conjunctive use of groundwater in sustaining a presently developed agricultural area which is primarily in pasture, vineyard, row and orchard crops. The County is currently evaluating this information to accurately determine its needs of water from the Folsom South Canal.

The County believes that the Bureau should now be making studies toward eventual extension of the Canal into the County to deliver supplemental water. This information, together with environmental impact statements relating to the service area, will be required for support of contracts for the supplemental water.

Bureau of Reclamation - Loan Program

Oakdale Irrigation District Loan...............$ 4,100,000

The Bureau and O.I.D. have executed a loan contract and construction is under way. The budgeted $4,100,000 in fiscal year 1986-87 will be used to continue construction of the system improvements. It is expected that when completed, the system will be far more efficient and will conserve much water now unavoidably lost.

Bureau of Reclamation - Investigations

Delta Support Studies..........................$1,008,000

A wide variety of analyses and studies are required in the

Sacramento-San Joaquin Delta in connection with the existing and potential problems. Many of these programs involve cooperation with the State of California since both the State Water Project and the Federal Central Valley Project use the Delta as a means of conveying water across the Delta to their export pumping plants.

The State expends large sums in studying the effects of the cross-Delta flows on water quality in the Delta and on export waters and in studying the effects of Project operations on the fishery resources and Delta channels. The Bureau should have comparable funds with which to discharge its responsibilities toward the Delta.

We support the President's budget in the amount of $1,008,000 for these studies.

BEFORE THE BOARD OF SUPERVISORS OF THE SAN JOAQUIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, STATE OF CALIFORNIA

R-86-347

RESOLUTION APPROVING STATEMENTS TO BE SUBMITTED TO SUBCOMMITTEES ON ENERGY AND WATER DEVELOPMENT OF HOUSE OF REPRESENTATIVE AND SENATE APPROPRIATIONS COMMITTEES

- - - - - - - - - - - - - - - - - - -

WHEREAS, the Subcommittee on Energy and Water Development of the Committee on Appropriations of the United States House of Representatives and the Subcommittee on Energy and Water Development of the Committee on Appropriations of the United States Senate will each separately hold hearings on April 16, 1986, on the budgets of the U. S. Army Corps of Engineers and the Bureau of Reclamation; and

WHEREAS, numerous projects contained in those budgets are of benefit to San Joaquin County;

NOW, THEREFORE, BE IT RESOLVED that Supervisor George L. Barber is hereby authorized and directed to appear before the aforementioned congressional subcommittees in Washington, D. C., in support of the appropriations for pending flood control, navigation, and water supply projects which will be of benefit to San Joaquin County and to present the attached statements.

PASSED AND ADOPTED this 1st day of April, 1986, by the following vote of the Board of Supervisors, to wit:

AYES: Supervisors Barber, Castles, Sousa, Wilhoit

NOES: None

ABSENT: Supervisor Costa

DOUGLASS W. WILHOIT, Chairman
Board of Supervisors
San Joaquin County Flood Control
and Water Conservation District
State of California

ATTEST: JORETTA J. HAYDE
Clerk of the Board of Supervisors of the San Joaquin
County Flood Control and Water
Conservation District, State
of California

By Caroline Junco
Deputy Clerk

Seal

Mr. **Bonner**. Good morning.

I am Councilmember Al Bonner from the City of Stockton. I have been authorized by the City Council to support the Corps of Engineers' Bureau of Reclamations surveys and requests.

The past winter's flooding definitely points up the need for more flood control in Northern California.

I appreciate the opportunity to be here today. And, in closing, I would like to say anything you can do to help us will serve and help the citizens of the East Bay area.

During my employment, I participated in flood fights and I have seen the amount of damage that has been done by water.

[The statement of Mr. Bonner follows:]

STATEMENT BY THE CITY OF STOCKTON, CALIFORNIA
BEFORE THE
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
OF THE
U. S. HOUSE OF REPRESENTATIVES
THE HONORABLE TOM BEVILL, CHAIRMAN

APRIL 1986

WASHINGTON, D. C.

FLOOD CONTROL AND RECLAMATION APPROPRIATIONS
FISCAL YEAR 1986-87

City of Stockton, California

Mr. Chairman and Members of the Committee:

I am Councilmember Alfred B. Bonner of the City of Stockton, California, authorized by the Stockton City Council to make this statement before your honorable body today.

The City of Stockton supports the Corps of Engineers and Bureau of Reclamation surveys, flood control and reclamation projects in the following amounts:

1.	New Melones Project	$ 1,900,000
2.	Deepening of the Stockton Ship Channel to 35 feet and realigning part of the Channel	5,000,000
3.	Lower San Joaquin River Clearing and Snagging	1,500,000
4.	Sacramento-San Joaquin Delta Investigation	250,000
5.	Auburn-Folsom South	1,000,000
6.	Delta Support Studies	1,008,000

FLOOD CONTROL -- CORPS OF ENGINEERS

NEW MELONES PROJECT----------------------------------$ 1,900,000

The New Melones Dam, Reservoir and Power Plant are complete for operational purposes and necessary permits to operate have been secured. The project provided tremendous flood control benefits this spring.

The President's budget provides $1,900,000 for completion of remaining facilities and requirements of the project. This project should be completed so that it can serve all its authorized purposes and can maximize its benefits.

SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL DEEPENING--$5,000,000

The President's budget contains $3,900,000 for the San Francisco Bay to Stockton Ship Channel Deepening which will complete the dredging. The City supports $5,000,000 in order to finish the project.

LOWER SAN JOAQUIN RIVER CLEARING AND SNAGGING---------$1,500,000

Much of the Lower San Joaquin River channel upstream of Mossdale has become choked with sediment and debris as a result of upstream erosion and past floods. It is essential to continue this channel clearing program on the river system so it can carry its design flood flows without endangering adjacent properties. We support the funds included in the President's budget for this essential work.

SURVEY -- CORPS OF ENGINEERS

SAN JOAQUIN DELTA INVESTIGATION----------------------$ 250,000

The City Council supports the President's budget for this survey of the levees.

BUREAU OF RECLAMATION

AUBURN-FOLSOM SOUTH---------------------------------$1,000,000

The President's budget contains $1,000,000 for work in fiscal year 1986/87. Recent information made available regarding the cost of the construction of Auburn Dam is under review for the Federal-State Task Force. A recommendation regarding the construction of Auburn Dam should be available within a few months and the Bureau of Reclamation will need to proceed with studies required to modify its design in accordance with this recommendation. Water supplies which can be made available by Auburn Dam and Reservoir are essential to the resolution of the minimum flow problems in the Lower American River and to provide water for use in the Folsom South Canal service area.

The most important program of the Auburn-South Unit is the Folsom South Canal, which now stops ten miles north of the San Joaquin County line. San Joaquin County, with all the water agencies in Eastern San Joaquin County, completed a comprehensive groundwater management study of the area that would be served water from the Canal. This study has provided the County with useful information on conjunctive use of groundwater in sustaining a presently developed agricultural area which is primarily in pasture, vineyard, row and orchard crops.

The Bureau should study the eventual extension of the Canal into the County to deliver supplemental water. This information, together with environmental impact statements relating to the service area, will be required for support of contracts for the supplemental water.

DELTA SUPPORT STUDIES----------------------------------$1,008,000

A wide variety of analyses and studies are required in the Sacramento-San Joaquin Delta to contend with existing and potential problems. Many of these programs involve cooperation with the State of California since both the State Water Project and the Federal Central Valley Project use the Delta as a means of conveying water across the Delta to their export pumping plants.

The State expends large sums in studying the effects of the cross-Delta flows on water quality in the Delta and on export waters and in studying the effects of Project operations on the fishery resources and Delta channels. The Bureau should have comparable funds to deal with its responsibilities toward the Delta. We support the President s budget of $1,008,000 for these studies.

Resolution No. 86-0188

STOCKTON CITY COUNCIL

WHEREAS, on April 16, 1986, appropriate committees of the Congress of the United States will conduct hearings to consider Federal Appropriations for flood control, reclamation, and navigational projects and surveys for fiscal year 1986-87; and

WHEREAS, several projects and surveys to be considered at said Congressional hearings will be of benefit to the City of Stockton and its environs; and

WHEREAS, the expeditious construction of said projects and completion of said surveys is required to protect the health, welfare and safety of the residents of this area; now therefore

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF STOCKTON, AS FOLLOWS:

That the City of Stockton does hereby support the appropriation by the Congress of the United States of funds for fiscal year 1986-87 for the planning, continuation and completion of flood control, reclamation, and navigational projects and surveys; namely NEW MELONES PROJECT, SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL DEEPENING, LOWER SAN JOAQUIN RIVER CLEARING AND SNAGGING, SACRAMENTO-SAN JOAQUIN DELTA INVESTIGATION, AUBURN-FOLSOM SOUTH, AND THE DELTA SUPPORT STUDIES which affect the City of Stockton and its environs; be it

FURTHER RESOLVED, that the representative of the City of Stockton, Councilmember Alfred B. Bonner is authorized to appear before appropriate committees of the Congress of the United States on April 16, 1986 for the purpose of making presentations consistent with this resolution; be it

FURTHER RESOLVED, that the City Manager is hereby authorized and directed to send copies of this resolution to the Honorable Alan Cranston, the Honorable Peter Wilson, the Honorable Norman Shumway and the Honorable Richard Lehman.

PASSED, APPROVED and ADOPTED this 7th day of April, 1986.

/S/ BARBARA FASS
BARBARA FASS, Mayor
City of Stockton

ATTEST:

/S/ FRANCES HONG
FRANCES HONG, City Clerk
City of Stockton

I, Frances Hong, certify that this document is a true and correct copy of ____ No. ____ adopted by the City Council of the City of Stockton on ____ 19__ and on file in the office of the City Clerk of the City of Stockton

Frances Hong
Date: ____ 19__ City Clerk of the City of Stockton
By ____
Deputy

Mr. **Cologne**. Ben Austin.

Mr. **Austin**. Thank you, Mr. Chairman.

I represent Kern County. I have been advised we are very high on the priority list. Anything I say would not help any further.

I appreciate our position. We need $80,000 more than the President has recommended in the budget. We have support for that. I will give you the rest of the time for my colleagues who are not high on the priority list.

[The statement of Mr. Austin follows:]

TESTIMONY

of

BEN AUSTIN, SUPERVISOR
Second District, Kern County
California

IN SUPPORT OF APPROPRIATION TO CONTINUE THE
CORPS OF ENGINEERS CALIENTE CREEK
FLOOD CONTROL FEASIBILITY STUDY

before the

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE
ON ENERGY AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN

on

April 16, 1986

Dear Mr. Chairman and Members of this Subcommittee:

My name is Ben Austin. I am the Supervisor of the Second District of Kern County, California. I appear before you on behalf of the Kern County Board of Supervisors, the Kern County Water Agency, the Arvin-Edison and Kern Delta Water Districts, and the Lamont Storm Water District.

With me today are several representatives of Kern County. Together, we hope to impress upon you the vital importance of continuing the current studies to find a permanent solution to critical flood problems of Caliente Creek in the Arvin-Lamont area of Kern County. While they will not address you at this time, they do want you to know that they are here. They are: Randall L. Abbott, Director of the Department of Planning and Development Services, and Terry L. Paxton, Civil Engineer, Floodplain Management Division of the Department of Planning and Development Services. In addition, we are privileged to include in our delegation, our consultant, Mr. Amalio Gomez.

Over the past year, the Corps of Engineers, in cooperation with the County and the Kern County Water Agency, has made significant progress in the study of major aspects of our Caliente Creek flood problems. Study results are summarized in the Caliente Creek Progress Report dated March 1986, previously submitted to your technical staff by Mary Dignan, consultant to the Kern County Water Agency. The Kern County Water Agency continues to serve admirably as lead agency on the project, and I commend them for their efforts.

Our interest today, however, is in Fiscal Year 86-87 funding for the Corps of Engineer's Caliente Creek Flood Control Feasibility Study, which is a three-year project initiated during the Fiscal Year 84-85. The Fiscal Year 86-87 appropriation we seek will fund the remaining feasibility work required to complete the study.

The estimated cost of the feasibility study is about $1.2 million. We have been informed by the Corps of Engineers that beginning on March 15, 1986, the cost of the investigation will be shared with local interests on a 50/50 basis. We have also been advised that the total federal expenditures on the feasibility study up to March 15, 1986, will be about $500,000, and that the remaining cost to be shared is $700,000. The local share will be $350,000, one half of which will consist of services in kind and the other half will be a cash contribution, payable in advance every three months.

Anticipating sharing of cost, the Kern County Water Agency, on February 1, 1985, signed a 50/50 cost-sharing agreement with the Corps of Engineers to continue the feasibility study. This agreement commits Kern County to provide $200,000 per year for the study. Half of that amount is to be in cash, while the other half is to be in in-kind services. We are among the first--and the few--in the nation to enter into a cost-sharing agreement of this type with the Corps of Engineers.

The heartening and historic significance of this event lies in the fact that the members of the Caliente Creek Flood Control Task Force all agreed to participate in the cost-sharing agreement and have subsequently entered into a local cost-sharing agreement for that purpose. Today the County of Kern, the Kern County Water Agency, the Lamont Storm Water District, and the Arvin-Edison and Kern Delta Water Districts all are sharing the burden of study costs. This demonstration of the spirit of working together for the common good will, I believe, continue until a dam and flood channels are constructed, harnessing the destructive floodwaters of Caliente Creek, which in 1978 and 1983 caused over $31 million of damage to public and private property.

The Sacramento District of the Corps of Engineers believes that there is a reasonable chance that the Corps will be able to transfer some investigation funds from other areas in the country to the Caliente Creek investigation for use during the balance of the current fiscal year; possibly about $100,000. On this basis, the funding schedule would be as follows:

	Federal Cost	Local Cost
Remaining Appropriated Funds as of March 15, 1986	$ 30,000	$ 30,000
Probable Transfer of Funds	100,000	100,000
Amount in President's Budget	120,000	120,000
Funding Required for Fiscal Year 87-88	100,000	100,000
TOTAL COST	$ 350,000	$ 350,000

On this basis, it is evident that the report cannot be submitted as scheduled in February 1988. A more realistic date is November 1988. This delay can be prevented by having a somewhat larger appropriation for Fiscal Year 86-87, as indicated on the schedule below:

	Federal Cost	Local Cost
Remaining Appropriated Funds as of March 15, 1986	$ 30,000	$ 30,000
Probable Transfer of Funds	100,000	100,000
Appropriation in Fiscal Year 86-87	200,000	200,000
Appropriation in Fiscal Year 87-88	20,000	20,000
TOTAL COST	$ 350,000	$ 350,000

This procedure would require only a small appropriation of $20,000 in Fiscal Year 87-88 to cover the minor procedural expenses during the few months preceding formal submittal of the report in February 1988. Therefore, a funding of $200,000 in Fiscal Year 86-87 would be in accord with the optimum schedule for submitting the report in February 1988.

It is our desire that the feasibility study be completed and, the design phase initiated in the least amount of time possible. This will reduce the potential for major flood damage and will protect public and private property as well as human life. We, therefore, recommend that the amount to be appropriated for Fiscal Year 86-87 for the Caliente Creek investigation be raised from the $120,000 included in the President's budget to $200,000. This action would prevent a delay of nine months or more in the final submission of the feasibility report.

Thank you very much for your consideration.

Mr. LUTZ. I am Richard Lutz from the Oakdale Irrigation District. We are now at $4.1 million. We are on schedule, and we are on target.

On behalf of the taxpayers of the Oakdale Irrigation District, I thank you for your continued support.

[The statement of Richard Lutz follows:]

OAKDALE IRRIGATION DISTRICT

March 21, 1986

The Honorable Tom Bevill, Chairman
Committee on Appropriations
Sub-Committee on Energy and Water Development
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Bevill:

The Oakdale Irrigation District appreciates the efforts of you and your committee for having obtained an appropriation of $4,100,000 for fiscal year 1986. The second year of construction on the system's rehabilitation project was recently completed and is now more efficiently irrigating 2,360 acres of land through 34 miles of new pipeline serving 2,048 constituents.

The rehabilitation project of our 75-year-old system from open ditch laterals to pipeline will result in conservation of 50,000 acre feet of water annually when the project is completed; 50 percent of which is immediately effective through the work completed. The piped system will also increase our ability to control water and provide better water management. This project is consistent with the President's philosophy and policy on cost sharing as follows:

Federal Loan -	$17,845,000
District Contribution -	4,244,000
Total Project Cost:	$22,089,000

The President's budget for the Bureau of Reclamation's loan program indicates $4.1 million for the Oakdale Irrigation District in fiscal year 1987. We support this appropriation as being within our capabilities to administer. The schedule for appropriations, including our current estimates for future appropriations, is summarized as follows (in $ million):

FY 84 - 1.500
FY 85 - 6.200
FY 86 - 4.970
FY 87 - 4.100
FY 88 - 1.075

1205 East F Street / P.O. Box 188 / Oakdale, CA 95361 / (209) 847-0341 or 869-1363

The SRPA program has enjoyed the support of Congress for over 25 years. The loans are repaid 100 percent, some with interest. The money is used for facilities that make possible the continued production of food and fiber, as well as the creation of permanent jobs.

Your assistance and continued support for the completion of our project is greatly appreciated.

Very truly yours,

OAKDALE IRRIGATION DISTRICT

F Richard Lutz

F. Richard Lutz, President
Board of Directors

bc

cc: Tom Fujimoto, California Water Commission
Howard Wilson, CH2M Hill Engineers

Mr. SCHLANGE. I am Andrew Schlange, Manager of the Santa Ana Watershed Project. I appreciate the opportunity of submitting our agency's request for funding for the small projects loan.

The authority requests continued funding authorizations in the amount of $8,714,000 as outlined in the President's budget for construction of an imported water conveyance system to serve water customers.

[The statement of Mr. Schlange follows:]

3600 Tyler Street, Suite 207, Riverside, Calif. 92503 (714) 785-5411

SANTA ANA WATERSHED
PROJECT AUTHORITY

COMMISSION FOR THE PROJECT AUTHORITY

CHINO BASIN MUNICIPAL WATER DISTRICT
EASTERN MUNICIPAL WATER DISTRICT
ORANGE COUNTY WATER DISTRICT
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
WESTERN MUNICIPAL WATER DISTRICT

MANAGER
J. ANDREW SCHLANGE

March 25, 1986

Honorable Mark O. Hatfield, Chairman
Committee on Appropriations
Sub-Committee on Energy and Water Development (Public Works)
United States Senate
Washington, D.C.

Attention: Mr. Steve Crow, Staff Assistant

Dear Mr. Crow,

The Santa Ana Watershed Project Authority (SAWPA) filed for a loan under P.L. 84-984 (Small Reclamation Projects Act of 1956, as amended) and prepared a Project Report (Loan Application) which was approved by the Secretary of Interior and transmitted to Congress on October 3, 1983 as an approved project now fully eligible for Federal funding. Contracts with the USBR were executed on February 11, 1985. Total project cost is $18,728,000.

Federal funding in the amount of $4,000,000 was approved for Fiscal Year 1985/86. As recommended in the President's budget for Fiscal Year 1986/87, we are respectfully requesting that your committee provide for continuing funding of the project, in the amount of $8,714,000.

I plan to be in Washington D.C. during the week of April 14, 1986 when your Committee will be holding hearings on the appropriation bill, and I respectfully request the opportunity to appear before your Committee in support of the project. I am enclosing a summary of the SAWPA project which I will describe very briefly as a part of my testimony at the hearing.

I sincerely appreciate your assistance in scheduling the opportunity for me to appear before your Committee to testify on behalf of the SAWPA project.

Respectfully,

J. Andrew Schlange
General Manager
SANTA ANA WATERSHED PROJECT AUTHORITY

JAS:ps
Enclosure

3600 Tyler Street, Suite 207, Riverside, Calif. 92503 (714) 785-5411

SANTA ANA WATERSHED
PROJECT AUTHORITY

COMMISSION FOR THE PROJECT AUTHORITY

CHINO BASIN MUNICIPAL WATER DISTRICT
EASTERN MUNICIPAL WATER DISTRICT
ORANGE COUNTY WATER DISTRICT
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
WESTERN MUNICIPAL WATER DISTRICT

MANAGER
J. ANDREW SCHLANGE

March 25, 1986

Honorable Mark O. Hatfield, Chairman
Committee on Appropriations
Sub-Committee on Energy and Water Development (Public Works)
United States Senate
Washington, D.C. 20510

Mr. Chairman, my name is Andrew Schlange, General Manager of the Santa Ana Watershed Project Authority (SAWPA) and I appreciate the opportunity of submitting our agencies' request for funding of a USBR Small Projects Loan Program. The Authority hereby requests continued funding authorization in the amount of $8,714,000 as outlined in the President's 1986/87 Budget for construction of an Imported Water Conveyance System to serve water customers in a portion of Riverside County, California. As stated in previous testimony, this project is necessary to alleviate the reduction in water supplies to this area from the Colorado River. The new system being constructed will provide water from another source to supply established water uses, the majority of which is agricultural. The project consists of 85,000 feet of water line, a pump station and a 10 million gallon reservoir. Funds made available in the 1985/86 budget have allowed project design and partial construction to begin. Right-of-way acquisition is now underway, using local funds. The Loan Application Report was approved by the Secretary of the Interior on October 3, 1983 and contracts were executed with the USBR on February 11, 1985. To date, approximately $800,000 has been directly spent on the project. No grant funds are being requested. All Federal funding will be repaid. The following summarizes the project funding:

Total Project Cost		$ 18,728,000
Loan (30 year repayment)		$ 14,917,000
Local Contribution		$ 3,811,000
Rights-of-way	($ 100,000)	
Loan Application	(175,000)	
CEQA-EIR	(25,000)	
Filing Fee	(1,000)	
Local Administration of loan	(10,000)	
Proposed Pump Station	(1,226,000)	
Cash	(2,274,000)	

PROPOSED IMPORTED WATER CONVEYANCE SYSTEM

PROJECT SUMMARY

LOCATION

The Santa Ana Watershed Project Authority (SAWPA) is located within the boundary of the Santa Ana Watershed and includes portions of Orange County, Riverside County and San Bernardino County, approximately 55 air miles east of the city of Los Angeles, California.

ORGANIZATION

SAWPA was legally organized in 1973 under the laws of the State of California. SAWPA was created under a joint powers agreement between Western Municipal Water District, Chino Basin Municipal Water District, San Bernardino Valley Municipal Water District and Orange County Water District. In 1984, Eastern Municipal Water District joined the agency. SAWPA was created by these districts to act on their behalf in such matters as planning, constructing, operating and maintaining irrigation, water quality improvement or other projects financed privately or through loans or grants. The agency has authority to execute a contract with the United States for repayment of the loan, has the power of eminent domain and has authority to raise funds through assessments to member agencies as necessary for repayment of the loan.

PLAN

Western Municipal Water District of Riverside County, California, one of the five member agencies of SAWPA, currently relies on imported Colorado River Water supplied by the Metropolitan Water District of Southern California (MWD) as its sole source of supply. MWD currently has a contract entitlement of 2,011,500 acre feet per year of State Project Water and 1,212,000 acre feet per year of Colorado River Water.

Completion of the Central Arizona Project and Arizona use of its Colorado River Rights will cause MWD's Colorado River Water Entitlement to be reduced to 550,000 acre feet per year, a reduction of 55 percent compared to the current entitlement.

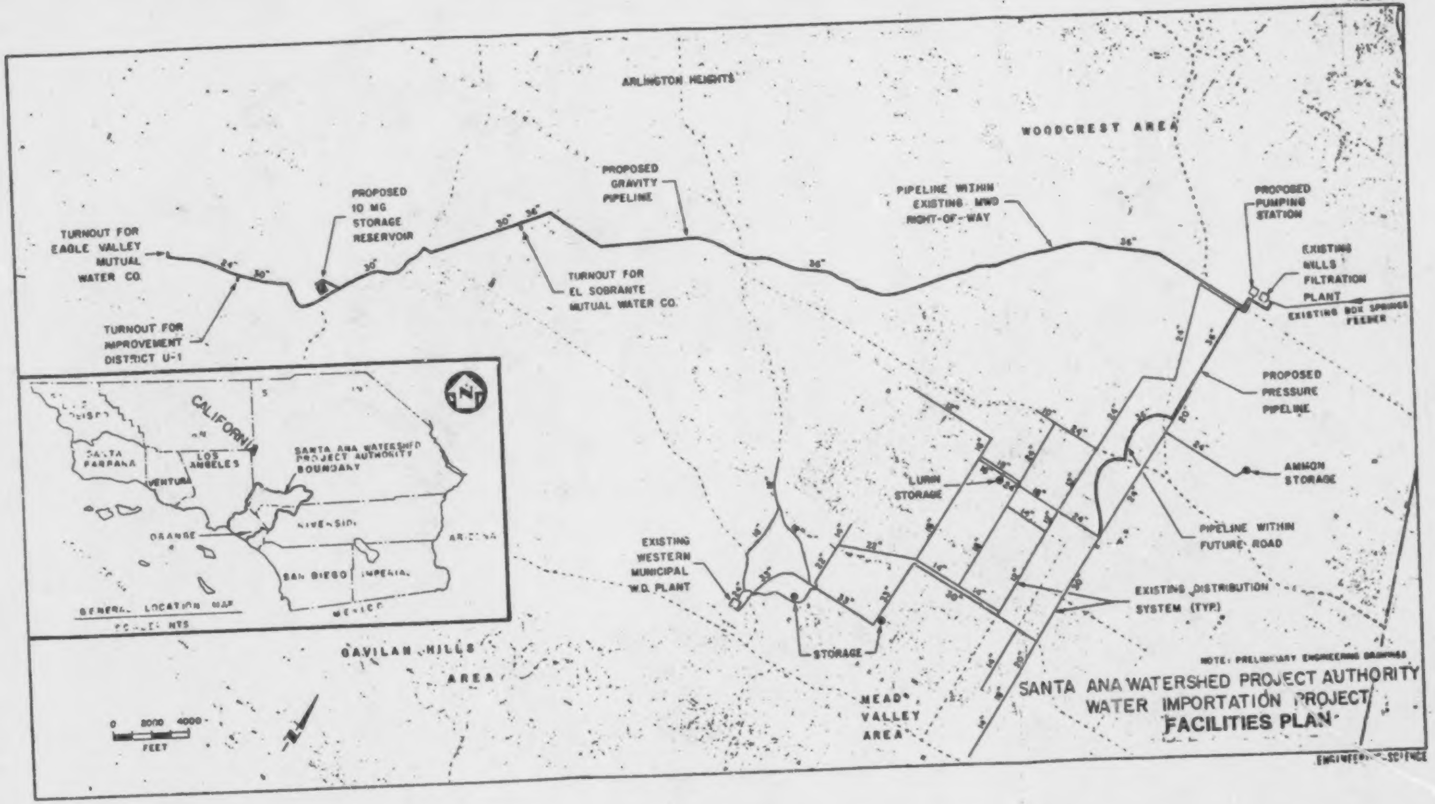
The SAWPA project will protect the existing agricultural economy in this portion of Western Municipal Water District by providing conveyance facilities to transport State Project water from MWD's Box Spring Feeder to agricultural users in lieu of the diminished Colorado River Water. The higher quality State Project water would provide additional benefit by decreasing the amount of applied water necessary to optimize crop yields.

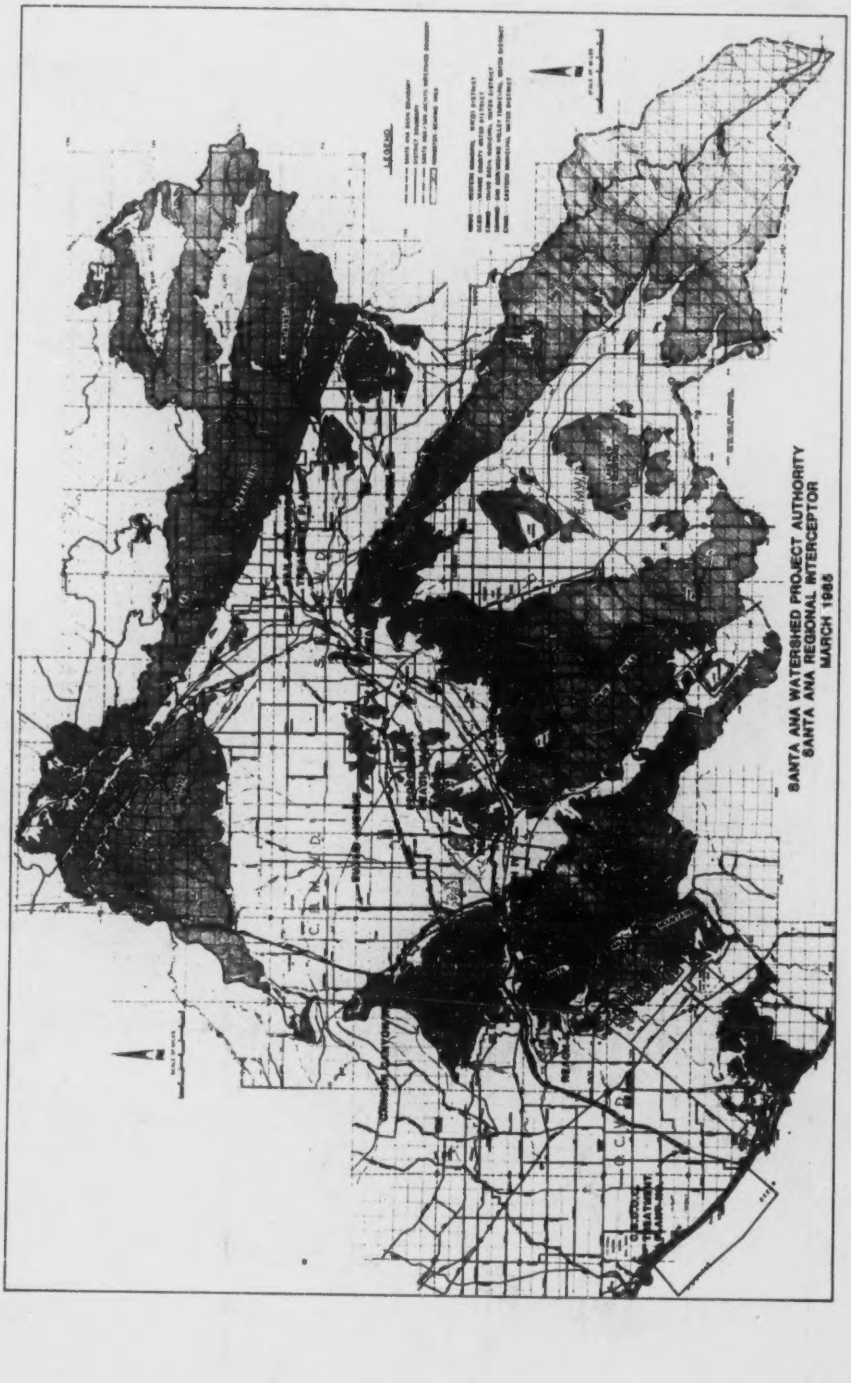
PHYSICAL WORKS

The principle project features are shown on Figure 1 and include:

1. Gravity pipeline beginning at the upstream side of the Mills Filtration Plant and running westerly approximately 65,000 feet. This pipeline would start as a 36-inch diameter line with a capacity of 32.5 cfs.
2. Ten million gallon storage reservoir located near the westerly end of the gravity pipeline. This reservoir would provide storage equal to approximately one-half the ultimate maximum day demand for balancing diurnal flow variations and as protection against emergency outage of the Box Springs Feeder.
3. Pressure pipeline beginning at the downstream side of the Mills Filtration Plant and running southerly approximately 18,300 feet. This pipeline would start as a 36 inch diameter line with an ultimate capacity of 41.7 cfs. An additional 12.2 cfs will be transported by existing pipelines in the area. The pipeline would connect to an existing distribution system which currently conveys treated Colorado River water from a southerly supply point.
4. Pumping station expansion at the site of the Mills Filtration Plant, supplying water to the pressure pipeline. The added facilities would be capable of pumping 33.3 cfs at a total dynamic head of 170 to 220 feet, to increase total plant capacity to 53.9 cfs.

FIGURE 1


ARLINGTON HEIGHTS
WOODCREST AREA
PROPOSED GRAVITY PIPELINE
PIPELINE WITHIN EXISTING MWD RIGHT-OF-WAY
PROPOSED PUMPING STATION
EXISTING MILLS FILTRATION PLANT
EXISTING BOX SPRINGS FEEDER
TURNOUT FOR EAGLE VALLEY MUTUAL WATER CO.
PROPOSED 10 MG STORAGE RESERVOIR
TURNOUT FOR EL SOBRANTE MUTUAL WATER CO.
TURNOUT FOR IMPROVEMENT DISTRICT U-1
PROPOSED PRESSURE PIPELINE
AMMON STORAGE
LURIN STORAGE
PIPELINE WITHIN FUTURE ROAD
EXISTING WESTERN MUNICIPAL W.D. PLANT
EXISTING DISTRIBUTION SYSTEM (TYP.)
STORAGE
GAVILAN HILLS AREA
MEAD VALLEY AREA
24"
30"
36"
CALIFORNIA
SANTA BARBARA
VENTURA
LOS ANGELES
ORANGE
RIVERSIDE
SAN DIEGO
IMPERIAL
ARIZONA
MEXICO
SANTA ANA WATERSHED PROJECT AUTHORITY BOUNDARY
GENERAL LOCATION MAP
N
0 2000 4000
FEET
NOTE: PRELIMINARY ENGINEERING DRAWINGS
SANTA ANA WATERSHED PROJECT AUTHORITY
WATER IMPORTATION PROJECT
FACILITIES PLAN
ENGINEERING-SCIENCE



SANTA ANA WATERSHED PROJECT AUTHORITY
SANTA ANA REGIONAL INTERCEPTOR
MARCH 1985

Mr. **Mills**. Mr. Chairman, members of the subcommittee, I am Stanley Mills, General Manager of the Rancho California Water District.

The President has included in the budget an appropriation for our Bureau of Reclamation small project loan. The project is unique in California, I think, because we are having the opportunity to manage a ground water basin before it is damaged in any way. We do urge the committee's recommendation of that appropriation.

[The statement of the Rancho California Water District follows:]

Rancho Water

Board of Directors:

Jon A. Lundin
Board President

Dallas Gray
Sr. Vice President

T. C. Rowe

Doug Kulberg

Tom A. Leevers

James A. Darby

Richard D. Steffey

Officers:

Stan T. Mills
General Manager

Gregg A. Lowry
Assistant General Manager

Thomas R. McAliester
Assistant to General Manager

Barbara J. Reed
District Secretary

Jeffrey L. Minkler
Treasurer

Rutan and Tucker
Legal Counsel

EXECUTIVE SUMMARY
SMALL RECLAMATION PROJECT LOAN
RANCHO CALIFORNIA WATER DISTRICT

THE DISTRICT

The Rancho California Water District (RCWD) is a large district located in the southernmost portion of Riverside County, adjacent in part with the San Diego County line. The District is comprised of some 100,000 acres of 150 square miles. All of the San Diego Aqueducts pass through the center of the District from the Skinner Reservoir and Filtration Plant just north of the District.

RCWD owns and operates Vail Dam with storage capacity of approximately 50,000 acre feet (larger than Skinner). RCWD also overlies the only large, high quality groundwater basin south of Chino.

The groundwater basin is made up of a complex system of water bearing materials (aquifers) ranging from the surface areas - 0- 250 feet below ground surface (younger alluvium) with extremely high recharge rates to deep, older sediments (Temecula Arcose) containing large amounts of high quality, usable water. The total estimated stored water, within 1000 feet of ground surface is 2,400,000 acre feet.

THE PROJECT

The project consists of pipelines and facilities to use imported water to recharge the younger alluvium **WITHOUT** taking capacity of the San Diego Aqueducts. This will allow up to 100,000 acre feet to be placed in storage and will benefit the entire region by allowing RCWD to operate from this storage, allowing water, which would otherwise be used by RCWD, to flow southward.

In addition to the recharge facilities, 38 wells are included to recover the stored water and to extract water from the deeper zones.

The immediate objective of the project is to provide facilities for RCWD to become more independent of the imported water facilities and to more effectively manage the tremendous storage capacity and production capability of the basin.

RANCHO CALIFORNIA WATER DISTRICT
28061 DIAZ ROAD • POST OFFICE BOX 174 • TEMECULA, CA 92390-2874 • 714 676-4101

A real potential exists for the project and the basin to become an economical facility to help meet San Diego's emergency storage requirements, providing both surface storage and underground storage which is not subject to evaporation. Water stored underground also does not require expensive filtration.

The total project cost is slightly over $24,000,000 of which RCWD will provide more than $3,000,000 "up front". The remaining $20,311,000 will be financed by a LOAN under the Bureau of Reclamation PL 84-984 Small Project Loan Program. This loan will be repaid with applicable interest over a period of approximately 20 years.

Mr. COLOGNE. John DeVito.

Mr. DEVITO. Mr. Chairman, Members, John DeVito. Let me thank you again for bringing your committee, Mr. Myers and others, to Contra Costa County when we met in Concord when you personally viewed and examined the importance of the San Joaquin Delta as the crossroads of the water of the State of California.

Let me just augment Congressman Miller's comments this morning, if I may, and respectfully ask that you prevail upon your Senate brothers and sisters in the passage of the House version of 3113. This measure, we believe, will go a long way to our objectives and effectively and efficiently free all the rivers, Federal and State, and projects to one operation, to conserve water.

It will take care of Congressman Fazio's valuable assets. We believe it will go a long way to encourage local and State Federal financing projects and minimize the number of times we have to come before your committee and ask for Federal funding.

Thank you so much, again.

[The statement of Mr. DeVito follows:]

Statement of : Contra Costa Water District
1331 Concord Avenue/P.O. Box H20
Concord, CA 94524

Presented By: John E. DeVito, General Manager

Before: U.S. Senate
Committee on Appropriations, Sub-Committee
On Energy and Water Development

Presentation Date: April 16, 1986

SACRAMENTO - SAN JOAQUIN DELTA WATER QUALITY

Honorable Chairman and Committee members, my name is John E. DeVito, General Manager of the Contra Costa Water District, a public agency of the State of California.

For over forty-five years, Contra Costa Water District by way of repayment contracts with the U.S. Bureau of Reclamation, has been responsible for the water supply for some 300,000 people, 23 industries that employ over 16,000 employees, and 150 small firms, through the Contra Costa Canal System, the first unit of the Federal Central Valley Project. The District also diverts water from the Delta under a vested water right dating back to the 1930's prior to the CVP. We depend solely and totally on the Sacramento - San Joaquin Delta for our water supply.

Due to the USBR's over-commitment of the CVP water supply and build-ups in exports from the Delta, we will experience re-occurring increased salt water intrusion in the Delta, to a level that is adverse to public health, causes loss of certain industrial products, adds severe penalty treatment costs to all industry, and causes damage to irrigated plants. (Note attachments.)

These adverse effects on public health, industry and agriculture occurred during 1959 - 1960 - 1961, due to USBR operations, and occurred again during the 1976 - 1977 drought, due to the obvious over-commitment of the CVP. For 161 days in 1959 and 143 days in 1961, due to USBR export pumping caused salt water intrusion, the Water District distributed notices to the County Health Department, doctors, hospitals, and the press warning of high sodium levels in the water supply. USBR statements indicate that these poor water quality levels will occur in the future during normal years.

Accordingly, Contra Costa Water District respectfully requests the support for the conditions necessary to protect the beneficial uses in the Sacramento-San Joaquin Delta, San Francisco Bay and Suisun Marsh, with particular attention to:

No. 29 New Melones Lake

The Contra Costa Water District reaffirms its position that the appropriations should be conditioned to provide that New Melones Reservoir shall be operated in accordance with the provisions of Decision 1422 of the State Water Resources Control Board. Contra Costa Water District support is contingent upon expeditious acquisition of reparian habitat and flood easements downstream of the dam and resolution of downstream salmon problems related to release schedules, flow and temperature.

No. 47 Auburn - Folsom South Unit

The Contra Costa Water District supports economic, environmental and fish and wildlife studies recommended by former Secretary of the Interior, Cecil Andrus. The Contra Costa Water District opposes appropriations of construction of Auburn Dam until the following have been completed:

1. Congress has reauthorized Auburn Dam.
2. The Bureau of Reclamation agrees to comply with provisions of Decision 1400 of the California State Water Resources Control Board;
3. The State has approved the design of the dam finally selected.

No. 50 San Luis Unit - San Luis Drain

Due to high concentrations of chemicals, including selenium, various heavy metals, agricultural pesticides and herbicides contained in San Luis drainage water, Contra Costa Water District must expand its opposition on behalf of the water supply integrity of not only the beneficial uses in Contra Costa Water District, the Bay, the Delta, and all exporters from the Delta, but also on behalf of all Californians who must bear the economic and environmental consequences of an over-committed Federal and State water supply.

Closure of Kesterson Reservoir by the USBR does not solve the San Joaquin Valley agricultural drainage problems nor does it prevent toxic agricultural drain water from being discharged into the Delta by way of the San Joaquin River.

We urge the Congress to appropriate funds for the USBR towards solving the agricultural drainage problems in the San Joaquin Valley and also prevent the discharge of drainage water into the Delta or streams tributary to the Delta.

No. 61 Delta Support Studies including Suisun Marsh Bureau of Reclamation and Department of Water Resources agree that operation of the Federal Central Valley and State Water Projects have adverse effects on municipal, industrial and agricultural users as well as on fish and wildlife in the Sacramento-San Joaquin Delta and San Francisco Bay Estuary. State Water Resources Control Board's Decision 1485 requires environmental studies be continued for use in future State water rights hearings.

Contra Costa Water District urges full fundings for these studies including efforts in the Bay and Suisun Marsh.

No. 62 San Felipe Division

Contra Costa Water District strongly urges Congress not to underfund or lower the budget level. More cuts will seriously disrupt the plans to meet the needs of Santa Clara and San Benito Counties. However, Contra Costa Water District urges the Congress to provide that all diversions of water from the Delta by the Bureau of Reclamation be subject to federally approved Delta water quality standards.

No. 79A Off Stream Storage

Contra Costa Water District supports funding of feasibility investigations for the Los Vaqueros Reservoir and the Los Banos Grande Reservoir. Los Vaqueros could also be used to provide an urgently needed standby or emergency water supply along with water quality benefits for other Bay Area water agencies such as East Contra Costa Irrigation District, Santa Clara Valley Water District, Alameda County Water District, Alameda County Flood Control and Water Conservation District Zone 7, East Bay Municipal Utility District, City

	of San Francisco, etc.
No. 80A	Delta Water Management Program Contra Costa Water District supports reprogramming an additional $400,000 to develop a program that would correct or at least minimize Delta water quality problems caused by water transfers.
No. 84	Environmental and Interagency Coordinations Activities, Mid-Pacific Region

In closing, we respectfully urge your support for Senate passage of the house approved version of HR 3113 which:

Directs the USBR to operate the Federal Central Valley Project jointly with the State Water Project, so that effectively and efficiently, the Sacramento-San Joaquin Delta water quality standards can be met, as well as increasing the water supply yield of the two projects.

Has the unique support of both environmental and water interests.

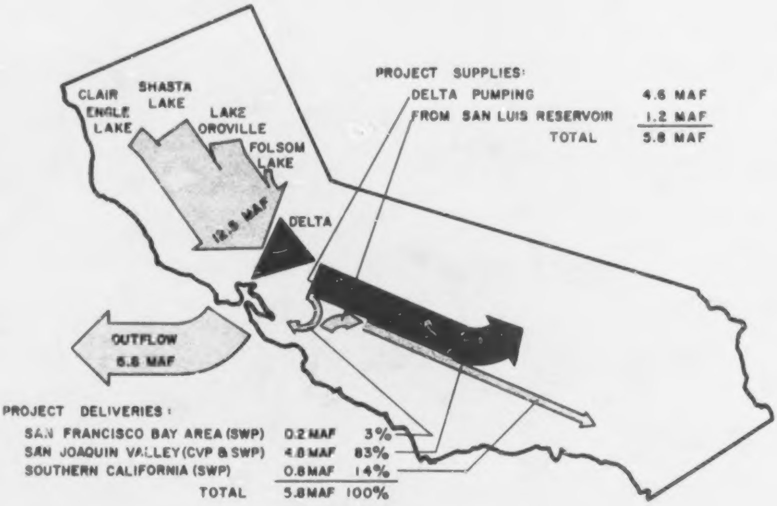
Will maximize local and State project financing and minimize the need for federal appropriations.

Please accept our appreciation for this opportunity to appear, and may this statement be made part of the record.

DELTA WATER SUPPLY AND USE - 1981

Water year 1981 (October 1, 1980 through September 30, 1981) was a dry year in the Sacramento River Basin. Natural river inflow to four major storage reservoirs totalled 11 million acre-feet (MAF), about 64 percent of the long-term average.

The diagram shows that the Sacramento-San Joaquin Delta received total river inflow of 12.5 MAF during the dry year. The inflow included augmentations of 1.4 MAF released from major storage reservoirs of the Federal Central Valley Project (CVP) and State Water Project (SWP).


PROJECT SUPPLIES:
DELTA PUMPING 4.6 MAF
FROM SAN LUIS RESERVOIR 1.2 MAF
TOTAL 5.8 MAF
CLAIR ENGLE LAKE
SHASTA LAKE
LAKE OROVILLE
FOLSOM LAKE
12.5 MAF
DELTA
OUTFLOW 6.8 MAF
PROJECT DELIVERIES:
SAN FRANCISCO BAY AREA (SWP) 0.2 MAF 3%
SAN JOAQUIN VALLEY (CVP & SWP) 4.8 MAF 83%
SOUTHERN CALIFORNIA (SWP) 0.8 MAF 14%
TOTAL 5.8 MAF 100%

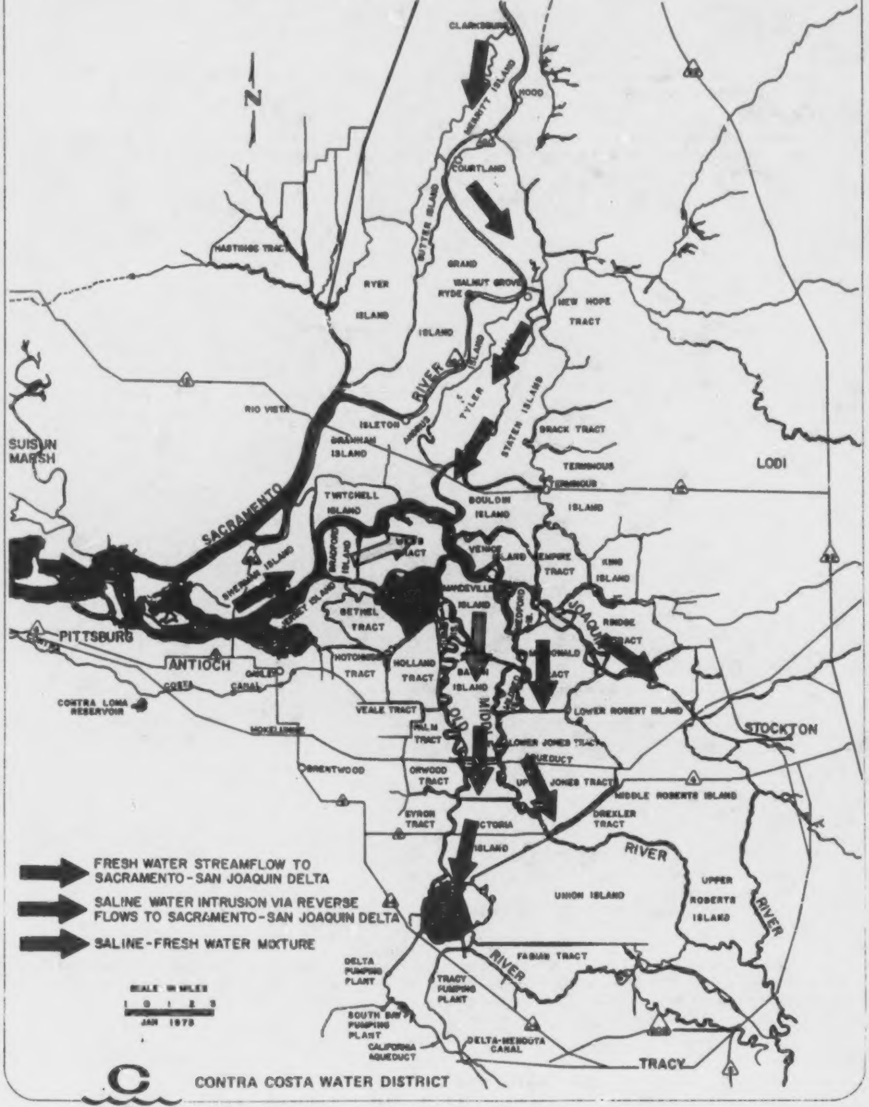
Use of the Delta's 1981 inflow is summarized as follows:

Outflow to San Francisco Bay	6.8 MAF	54 percent of inflow
Water used within Delta	1.1	9
CVP and SWP project pumping	4.6	37
	12.5 MAF	100 percent

The diagram summarizes total CVP and SWP Delta water supplies as well as the projects' deliveries during 1981. Note that the supplies included 1.2 MAF pumped from the Delta before the water year began and stored for later use in San Luis Reservoir, located in the San Joaquin Valley near Los Banos.

CONTRA COSTA WATER DISTRICT

SACRAMENTO-SAN JOAQUIN DELTA

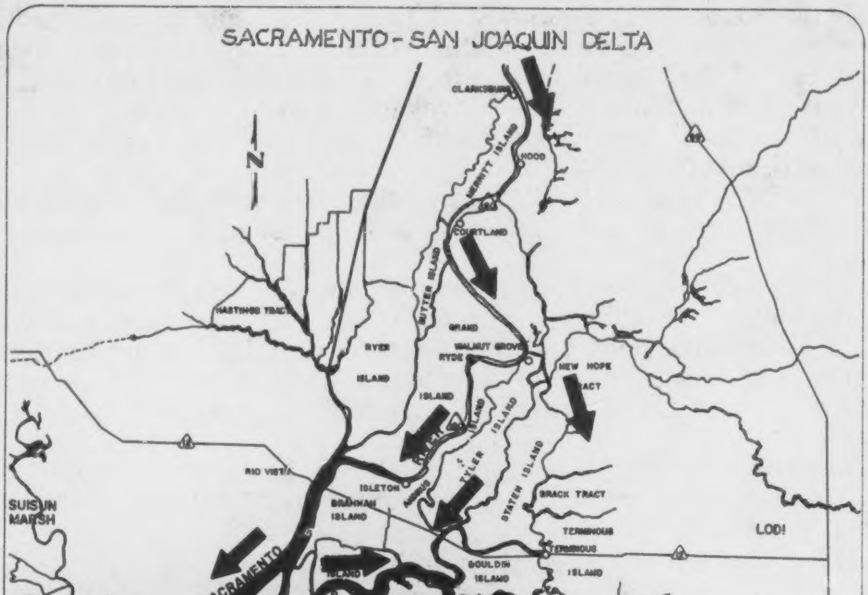

N
CLARKSBURG
MERRITT ISLAND
HOOD
COURTLAND
SUTTER ISLAND
HASTINGS TRACT
RYER ISLAND
GRAND ISLAND
WALNUT GROVE
RYDE
NEW HOPE TRACT
RIVER
TYLER ISLAND
STATEN ISLAND
RIO VISTA
ISLETON
BRACK TRACT
SUISUN MARSH
GRAND ISLAND
TERMINOUS
LODI
TWITCHELL ISLAND
BOULDIN ISLAND
SACRAMENTO
BRADFORD ISLAND
WEBB TRACT
VENICE ISLAND
EMPIRE TRACT
KING ISLAND
SHERMAN ISLAND
JERSEY ISLAND
MANDEVILLE ISLAND
BETHEL TRACT
JOAQUIN
RINDGE TRACT
PITTSBURG
HOTCHKISS TRACT
HOLLAND TRACT
BACON ISLAND
MCDONALD TRACT
ANTIOCH
OAKLEY
CONTRA COSTA CANAL
CONTRA LOMA RESERVOIR
VEALE TRACT
MIDDLE RIVER
LOWER ROBERT ISLAND
STOCKTON
KNIGHTSEN
PALM TRACT
LOWER JONES TRACT
AQUEDUCT
BRENTWOOD
ORWOOD TRACT
UPPER JONES TRACT
MIDDLE ROBERTS ISLAND
BYRON TRACT
VICTORIA ISLAND
DREXLER TRACT
RIVER
UNION ISLAND
UPPER ROBERTS ISLAND
RIVER
FABIAN TRACT
RIVER
DELTA PUMPING PLANT
TRACY PUMPING PLANT
SOUTH BAY PUMPING PLANT
CALIFORNIA AQUEDUCT
DELTA-MENDOTA CANAL
TRACY
SCALE IN MILES
1 0 1 2 3
JAN 1975

FRESH WATER STREAMFLOW TO SACRAMENTO-SAN JOAQUIN DELTA

SALINE WATER INTRUSION VIA REVERSE FLOWS TO SACRAMENTO-SAN JOAQUIN DELTA

SALINE-FRESH WATER MIXTURE

CONTRA COSTA WATER DISTRICT


SACRAMENTO-SAN JOAQUIN DELTA
N
CLARKSBURG
HOOD
MERRITT ISLAND
COURTLAND
SUTTER ISLAND
HASTINGS TRACT
RYER ISLAND
GRAND
WALNUT GROVE
RYDE
ISLAND
NEW HOPE TRACT
TYLER ISLAND
STATEN ISLAND
RIO VISTA
ISLETON
BRANNAN ISLAND
SUISUN MARSH
BRACK TRACT
TERMINOUS
LODI
SACRAMENTO
BOULDIN ISLAND
ISLAND
WEBB TRACT
BRADFORD ISLAND
VENICE ISLAND
EMPIRE TRACT
KING ISLAND
JERSEY ISLAND
BETHEL TRACT
JOAQUIN
RINDGE TRACT
PITTSBURG
ANTIOCH
HOTCHKISS TRACT
HOLLAND TRACT
BACON ISLAND
Mc DONALD TRACT
CONTRA COSTA CANAL
CONTRA LOMA RESERVOIR
VEALE TRACT
LOWER ROBERT ISLAND
STOCKTON
OLD
MIDDLE
LOWER JONES TRACT
AQUEDUCT
BRENTWOOD
ORWOOD TRACT
UPPER JONES TRACT
MIDDLE ROBERTS ISLAND
BYRON TRACT
VICTORIA ISLAND
DREXLER TRACT
RIVER
UNION ISLAND
UPPER ROBERTS ISLAND
RIVER
NET DOWNSTREAM FLOW
NET REVERSE FLOW
FABIAN TRACT
RIVER
DELTA PUMPING PLANT
TRACY PUMPING PLANT
SCALE IN MILES
1 0 1 2 3
JAN 1973
SOUTH BAY PUMPING PLANT
CALIFORNIA AQUEDUCT
DELTA-MENDOTA CANAL
TRACY
CONTRA COSTA WATER DISTRICT

Mr. **McKean**. I am George E. McKean, Chairman of the Board of Directors of the Mid-Valley Water Authority. I am appearing today on behalf of the Authority in support of the U.S. Bureau of Reclamation's San Joaquin Valley conveyance study.

With me today are Richard Schafer and Mr. Jeff Taylor, representing the Authority.

My written statement has been submitted. In order to save the committee's time, I ask that it be included as part of the hearing record.

We request that the committee allocate $500,000 from the existing Bureau of Reclamation's general investigation appropriations in the President's budget for the advance planning and preliminary engineering design for the selected project of the San Joaquin Valley conveyance investigation that will be completed this fiscal year.

Thank you for the privilege of appearing before your committee.

I am also President of the River Conservation District. I will not speak to that.

[The statement of Mr. McKean follows:]

STATEMENT OF THE
MID-VALLEY WATER AUTHORITY*
BEFORE THE
UNITED STATES SENATE
COMMITTEE ON APPROPRIATIONS, SUB-COMMITTEE
ON ENERGY AND WATER DEVELOPMENT (PUBLIC WORKS)
THE HONORABLE MARK O. HATFIELD, CHAIRMAN

Mr. Chairman, and Members of the Committee:

My name is George D. McKean and I am Chairman of the Board of Directors of the Mid-Valley Water Authority. I am appearing today in support of the U.S. Bureau of Reclamation's Feasibility Investigation line item entitled San Joaquin Valley Conveyance Study requesting the Committee to allocate $500,000, if necessary from existing Bureau of Reclamation general investigation appropriations in the President's budget, for advance planning and preliminary engineering design for the selected project alternative of the on-going feasibility study that will be completed this fiscal year. Without these funds a hiatus in the orderly development of the Mid-Valley Canal Project will occur.

SUMMARY

The Mid-Valley Water Authority (MVWA), a Joint Exercise of Powers Agency, consisting of 29 public agencies in six counties of the San Joaquin Valley, California, was formed December 3, 1982. The service area of the MVWA covers approximately 3.4 million acres of irrigated agriculture, and has a long-term groundwater overdraft of 1.5 million acre-feet per year.

The Bureau of Reclamation has identified unallocated firm CVP water as a result of the Coordinated Operations Agreement with the State Department of Water Resources (DWR), operations of the Trinity River, interim CVP water available from non-use of allocations under existing contracts, and additional surplus CVP water of approximately 1.1 million acre-feet per year, a portion of which will be subject to contractual negotiations with the MVWA upon the removal of the moritorium, as imposed by former Secretary of Interior Andrus, of further contracts for delivery of water from the Delta.

The President's Budget for fiscal year 1985-86 provided sufficient funds to complete the planning study for determining the most economical routing of the Mid-Valley Canal for delivery of additional supplemental water supplies to help resolve the groundwater overdraft within the MVWA service area.

The Mid-Valley Canal Project authorizing legislation, HR3182 and S1898, has been introduced in the Congress. Should the Congress fail to authorize the project this session there would be no funds available during fiscal year 1987. Therefore, the Authority urges the Committee to allocate $500,000 for the San Joaquin Valley Conveyance Investigation advance planning to continue the orderly development of the project

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*Presented by George D. McKean, Chairman of the Board of Directors of the Mid-Valley Water Authority, in Washington, D.C. on April 16, 1986.

ORGANIZATION

The Mid-Valley Water Authority was organized under the Joint Exercise of Powers Act, Articles I and II of Chapter 5 of Division 7, Title 1 of the Government Code of the State of California (Section 6500 et seq.) on December 3, 1982. The public districts, which are members of the MVWA and their percentage of participation therein, are set forth in Table 1. Each of the 29 public agencies is represented by a director and alternate on the Board of Directors and on an Advisory Committee. The MVWA was organized as an institutional device for the continuation and coordination of the various efforts that have been independently pursued by the member agencies to secure a supplemental water supply and the construction of a conveyance facility for the delivery of the supplemental water supply to the MVWA service area.

SERVICE AREA

The MVWA includes a service area of approximately 3.4 million acres of irrigated agricultural lands. The boundary of the MVWA extends from the Merced County line on the north to the southerly boundary of the Arvin-Edison Water Storage District on the south, and generally from the Sierra foothills to the trough of the San Joaquin Valley.

Lands within the Counties of Madera, Merced, Fresno, Kings, Tulare and Kern are of membership in the MVWA. A map of the MVWA service area is included as Plate 1.

HISTORY

The lands included within the Mid-Valley Water Authority are, for the most part, lands which are presently under cultivation and indeed, these areas were some of the earliest extensively irrigated lands in the State.[1] While the service area of the Mid-Valley Water Authority was included within the planning for the integrated operation of the Central Valley Project, the construction of a delivery facility (Mid-Valley Canal) has not been accomplished. Studies for the development of the East Side Division of the Central Valley Project proceeded through the late 1950's and early 1960's and a proposed feasibility report for the East Side Division, Initial Phase, was sent to the Secretary of the Interior in 1968.[2] As the overall imbalance between the available water supplies and the consumptive demands became more and more apparent, the member agencies independently persisted in their efforts to urge the federal and state governments to proceed with the development of a delivery capability for the Central Valley Project waters that were and are available in the Delta to the area now included within the Mid-Valley Water Authority. As a result of these efforts, the State Department of Water Resources and the U.S. Bureau of Reclamation jointly studied the construction of a Mid-Valley Canal which would incorporate features of the State Water Project and the Delta Mendota Canal of the CVP. Those studies culminated in the publication of a report entitled "Mid-Valley Canal, East Side Division, Central Valley Project, California, 'A report on the Mid-Valley Canal Feasibility Investigation' U.S. Department of the Interior". (January, 1981). The Report contained an extensive consideration of the needs within the proposed service area and the hydrologic, environmental and economic considerations of constructing the proposed facility as a federal facility. In conjunction with that report, tentative allocations of the available CVP water supply were made among the various agencies that were seeking to participate, those allocations being predicted upon criteria developed by the Bureau of Reclamation.

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[1] Central Valley Project Documents Part 1, Authorizing Documents, 84th Congress 2nd Session House Document #416 (1956) Intro. pp 1-16.

[2] East Side Division, Initial Phase, Central Valley Project California "A Report on the Feasibility of Water Supply Development". U.S. Department of the Interior, Bureau of Reclamation (December 1965 Rev. June 1966).

When the study for the Mid-Valley Canal was commenced, the Bureau of Reclamation had identified a firm annual water supply in the Delta of approximately 500,000 acre-feet as available for export to the proposed service area. Before the report could be completed, the Bureau of Reclamation revised its estimations of the marketable CVP yield in light of Delta water quality considerations.[3] In view of these revised yield calculations, the report proposed that there be no federal action for Congressional authorization of the Mid-Valley Canal until a firm water supply is available. The report does conclude, however, that the Mid-Valley Canal service area should be considered as an area to utilize any additional yield originating from existing CVP facilities.

While the Mid-Valley Canal that was the subject of the aforesaid feasibility investigation has not been authorized for construction, the residents and public agencies within its projected service area have proceeded with the formation of the Mid-Valley Water Authority to promote its purposes. The geographic configuration of this authority as well as the participation percentages of the various member agencies were developed in substantial reliance upon the service area and allocation criteria used by the Bureau of Reclamation in its feasibility study. The Authority was organized to continue the search for a reliable water supply for the east side of the San Joaquin Valley.

[3] Mid-Valley Canal Feasibility Study, p. 66.

The lands included within the Mid-Valley Water Authority are among the most severely overdrafted agricultural lands in the State. The Mid-Valley Canal feasibility investigation identified an estimated 1.5 million acre-feet annual groundwater overdraft.

The California State Department of Water Resources in Bulletin 118-80, identified eight basins as being subject to critical conditions of overdraft in the San Joaquin hydrologic study area. Seven of those basins, the Chowchilla, Madera, Kings, Kaweah, Tulare Lake, Tule and Kern County basins essentially make up the service area of the present Mid-Valley Water Authority. Those basins were identified by DWR as having a long-term annual overdraft of 1,339,000 acre-feet.

In identifying the needs within the Mid-Valley Canal service area, the U.S. Bureau of Reclamation concluded that the local surface supplies have been almost completely utilized and cannot realistically meet the demand. In addition, the report notes that overall basin irrigation efficiency is very high and conservation gains would likewise be of no consequence toward correcting the overdraft. The Mid-Valley feasibility report concluded in pertinent part as follows:

> "A replacement water supply for the Mid-Valley Canal general service area is urgently needed. The present annual groundwater overdraft of over 1 million acre-feet forecasts the abandonment of over 440,000 acres of highly productive irrigated agricultural lands within the foreseeable future unless a replacement supply can be imported."

Under the Coordinated Operations Agreement (COA) being developed between the U.S. Bureau of Reclamation and the California State Department of Water Resources, a remaining uncommitted CVP yield was identified in the amount of 1.1 million acre-feet per year. Additional CVP water is also anticipated to be available from the modified Trinity River operations and on an interim basis (interim water is defined as existing firm yield under contract but not as yet used).

The MVWA is further supporting the construction of the Auburn Dam project, and intends to become a cost sharing participant and a recipient of a portion of the project yield.

Thus, with an appropriate conveyance facility, the MVWA would be capable of importing nearly 1-million acre-feet of additional supplemental water supply to the MVWA service area.

PURPOSE

The Bureau of Reclamation and the MVWA entered into a "Letter of Intent for the Funding and Conduct of Studies to Resolve Groundwater Overdraft and Meet the Water Needs in the San Joaquin Valley" and an "Agreement Between the United States of America and Mid-Valley Water Authority Providing for the Funding of

Certain Studies Pertinent to the Provision of Supplemental Water Supplies for the San Joaquin Valley" in November 1983 for determining the most feasible method of importing additional surface water supplies needed to offset the groundwater overdraft within the MVWA service area. The MVWA is cost-sharing the studies by contributing funds and by providing in-kind services. The Bureau, State, DWR and the MVWA initially jointly studied the capability of all existing facilities for delivery of additional CVP water within the MVWA service area and currently are concluding the feasibility study that will identify the selected project alternative routing for the Mid-Valley Canal.

The San Joaquin Valley Conveyance Study will further evaluate necessary pumping plants, canal structures, consider the integration of off-stream water conservation storage reservoirs, and evaluate other facilities needed for delivery of supplemental water to resolve the groundwater overdraft and related problems in the service area, including drainage, erosion and sedimentation, flooding and fish and wildlife deterioration.

The authorizing legislation for the Mid-Valley Canal has been introduced and the House as HR3182 (Lehman, Coelho, Thomas and Pashayan) and in the Senate as S1898 (Wilson). The bills are identical and the Authority is urging the Congress to favorably act on the legislation during this session. However, should the Congress fail to authorize and include an appropriation for the Mid-Valley Canal Project this session, the orderly development of the project would be seriously impaired. Therefore, the Authority urges the Committee to allocate $500,000, if necessary from existing Bureau of Reclamation general investigation appropriations in the President's budget, for advance planning and preliminary engineering design for the selected project alternative of the on-going feasibility study that will be completed this fiscal year.

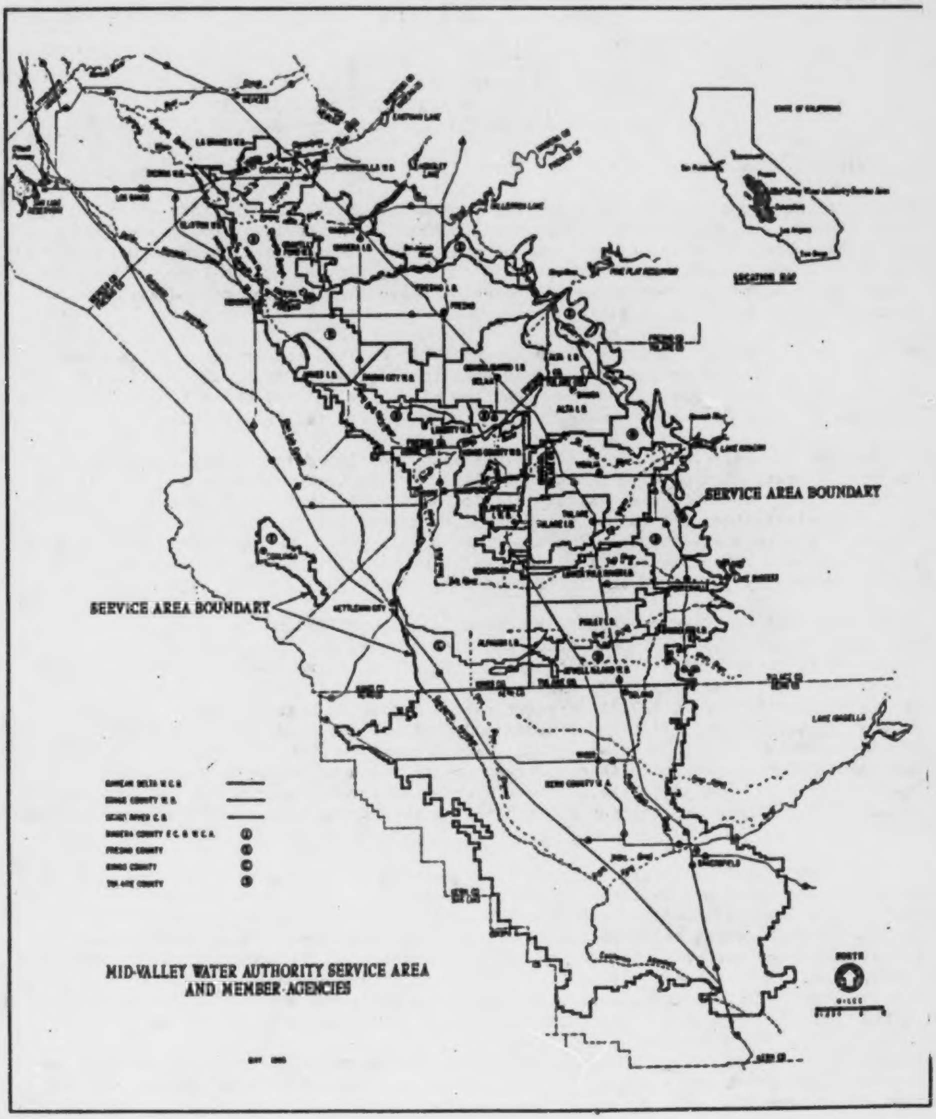
I appreciate the privilege of appearing before the Committee and respectively urge your support and ask that my statement be made a part of the hearing record.

TABLE 1

MEMBERSHIP COMPOSITION OF MID VALLEY WATER AUTHORITY

Member Agency	Participation %
Alpaugh Irrigation District	1.44
Alta Irrigation District	1.84
Atwell Island Water District	1.23
Chowchilla Water District	0.62
City of Corcoran	0.62
Clayton Water District	0.62
Consolidated Irrigation District	3.27
County of Fresno	7.15
Fresno Irrigation District	2.05
Gravelly Ford Water District	0.52
City of Hanford	1.44
James Irrigation District	0.92
Kaweah Delta Water Conservation District	7.15
Kern County Water Agency	7.15
County of Kings	4.09
Kings County Water District	7.15
Kings River Conservation District	7.15
Labranza Water District	1.23
Lakeside Irrigation Water District	1.84
Liberty Water District	1.23
Lower Tule River Irrigation District	4.09
Madera County Flood Control & Water Conservation Agency	7.15
Madera Irrigation District	3.27
Pixley Irrigation District	7.15
Raisin City Water District	7.15
Saucelito Irrigation District	1.44
Sierra Water District	2.25
County of Tulare	7.15
Tulare Irrigation District	1.64
	100.00

Plate 1



SERVICE AREA BOUNDARY
SERVICE AREA BOUNDARY
FRESNO COUNTY
KINGS COUNTY
TULARE COUNTY

MID-VALLEY WATER AUTHORITY SERVICE AREA AND MEMBER-AGENCIES

STATEMENT OF THE
KINGS RIVER CONSERVATION DISTRICT*
BEFORE THE
UNITED STATES SENATE
COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT (PUBLIC WORKS)
THE HONORABLE MARK O. HATFIELD, CHAIRMAN

Mr. Chairman, and Members of the Committee:

My name is George D. McKean and I am President of the Board of Directors of the Kings River Conservation District of Fresno, California. I am appearing today in support of the Redbank-Fancher Creeks Flood Control Project on behalf of the Board of Directors of the Kings River Conservation District. In addition, the California legislature has passed and the Governor has signed legislation approving the project and authorizing State financial participation.

My purpose before the Committee is to request that project construction be retained in the FY86-87 budget in an amount not less than the $2,000,000 currently provided in the President's budget. The subject construction element will provide immediate flood protection to the Friant-Kern Canal of the important Central Valley Project.

The Redbank-Fancher Creeks project was initially identified in the Big Dry Creek project investigation of 1940 and the resulting Fresno County streams project authorization. In 1956, the Congress specifically authorized the investigation of the project modification relating to the Redbank, Fancher, and Big Dry Creeks stream system. Unfortunately, federal funds for the investigation were not appropriated until the disasterous 1969 floods. The completed investigation proves the project to be both economically justified and environmentally sound.

The Redbank-Fancher Creeks Project is economically justified on the basis of flood damage prevention alone. Though other benefits accrue, they are not required to produce a positive benefit-cost ratio. The project will provide protection to 57,000 acres containing a population in excess of 120,000. The final benefit-cost ratio is estimated near 2:1 at an 8-5/8% interest rate. Estimated average annual flood damages exceed $14,000,000 and affect both urban and agricultural land. The project will also protect an open irrigation canal system which transverses 210,000 acres of the world's most productive agricultural lands; Fresno County's annual production exceeding 2.0 billion dollars. The project will control the historic flooding which has seen the stream and canal systems overtop their banks an average of once every four years since 1953.

In July 1980, the investigation report was forwarded to the Chief of the Corps of Engineers and subsequently forwarded to the Congress as House Document 98-147. The project has been included in authorization legislation passing the House of Representatives during three recent sessions of the Congress. Though not enacted, the specially worded authorization reflected the awareness of the Congress of the project's special needs. The project is now included in S1567 and HR6, both authorizing project construction. Congressional action effecting the requested appropriations is critical in that it will prevent further flood damage and increases in project costs.

I appreciate the privilege of appearing before the Committee and the past support the Committee has given the project. I respectfully urge your continued support and ask that my statement be made a part of the hearing record.

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* Presented by George D. McKean, President, Kings River Conservation District, in Washington, D.C. on April 16, 1986.

STATEMENT OF THE
KINGS RIVER CONSERVATION DISTRICT *
BEFORE THE
UNITED STATES SENATE
COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT (PUBLIC WORKS)
THE HONORABLE MARK O. HATFIELD, CHAIRMAN

The Kings River Conservation District and the people of the central county area of Fresno County, California are deeply appreciative of the opportunity to have our presentation heard by the honored members of the Congress. While the Redbank-Fancher Creeks Flood Control Project is not large by some standards, it is critically important to the Fresno-Clovis metropolitan area which is the business center of the most productive agricultural county in the world; gross annual production exceeding 2.0 billion dollars.

This report, first submitted in May 1971, has been prepared to substantiate the continuing vital need for flood control works specified in the Redbank and Fancher Creeks project report.

AUTHORIZATION:

The Redbank-Fancher Creeks Project is a modification of the existing Fresno County streams, California authorization incorporating the enlargement of the Big Dry Creek Dam and the containment of the balance of the stream group.

The Congress, on June 13, 1956, authorized the Corps of Engineers to re-investigate the stream group project, this following the major floods of 1955 and 1956. Unfortunately, funds were not provided and the Corps did not begin the investigation until the area had suffered its worst flooding in history during January and February of 1969. The release of funds and the start of the investigation occurred in July 1970, some fourteen years after Congressional authorization. Unfortunately, the floods of 1986 find the final authorization still pending.

PROJECT LOCATION AND NEED:

Redbank, Fancher, and Big Dry Creeks of the Fresno County Stream Group and their tributaries and related streams addressed by the project, are located on the western slope of the Sierra Nevada mountains. The watershed encompasses some one hundred seventy-five square miles and generates storm runoff which flows through the heart of the metropolitan area. The flows impact directly on the open irrigation canal system which transverses some 210,000 acres of the world's most productive agricultural land and 45,000 acres of a densely developed urban community with a population in excess of 350,000.

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* Presented by George D. McKean, President, Kings River Conservation District, in Washington, D.C. on April 16, 1986.

It is currently estimated that the floodplain to be protected by the proposed project includes 57,000 acres with a population of 120,000 (1982) and a market value in excess of 2.4 billion dollars. Total estimated average annual flood damages exceed $14,000,000 and affect both urban and agricultural properties.

HISTORY OF FLOODING:

As a result of the uncontrolled nature of the subject stream group, flooding has occurred frequently. Floods of record occurred in March 1938, December 1955, January 1956, January 1969, February 1969, March 1978 and January 1983. In addition, available records indicate flooding of lesser severity occurred in 1914, 1915, 1916, 1937, 1958, 1965, 1972, 1977, and 1986 with the streams and irrigation canal system overtopping their banks on the average of once every four years since 1953.

Although the recent floods which occurred in March 1978, January 1983, and February 1986 were of a lesser magnitude than those of 1969, thousands of dollars in damages to private homes, public roads, irrigation facilities and hundreds of acres of prime agricultural lands were experienced. Such floods again demonstrated the urgent need for immediate construction of flood control works.

LOCAL SUPPORT:

Following the floods which occurred in January and February 1969, the Fresno Area was declared a part of California's disaster area. With the realization that millions of dollars in flood damages could have been prevented and that a reocurrence of such floods would be even more devastating, a public hearing on the subject of needed flood control works was held on February 28, 1969. Hundreds of the community's citizens representing some seventy-five public and private organizations met and drafted resolutions to the U.S. Army Corps of Engineers and legislative representatives urging the active pursuit of Redbank-Fancher Creeks Flood Control Project. Subsequently, the County of Fresno, the Cities of Fresno and Clovis, the Fresno Metropolitan Flood Control District, and the Fresno Irrigation District authorized direct work with the Corps of Engineers and the Congress to secure adequate flood protection for the Fresno-Clovis metropolitan area.

In an effort to ensure the availability of lands needed for the required flood control structures, the County of Fresno acting jointly with the Fresno Metropolitan Flood Control District did, on October 22, 1974, effect open-space and conservation zoning of approximately 500 acres. More recently, the Cities of Clovis and Fresno, the County of Fresno, and the Fresno Metropolitan Flood Control District, have signed contracts appropriating $335,000 per year to acquire the necessary project lands. Project land acquisition is now well under way.

Relatedly, the California Water Commission has historically supported and continues to support the project. Further, the State

Reclamation Board has submitted a supporting letter of intent for local assurances. Most recently, the California Legislature has passed and the Governor has signed legislation authorizing State support of and financial participation in the project.

At the local level, a broadly based Citizens Project Advisory Committee has been created by the Flood Control District. The Committee and the sixteen community organizations and agencies it represents have reviewed and confirmed the project's need and design features. The Committee has also structured a financing plan to ensure the availability of the required local cost share and the equitable distribution of those costs.

ENVIRONMENTAL CONSIDERATIONS:

Upon completion and distribution of the Draft Feasibility Report and Draft Environmental Impact Statement, a public hearing was held within the project area by the Fresno Metropolitan Flood Control District, the local project sponsor, and the U.S. Army Corps of Engineers. Testimony submitted during the subject hearing indicated that there are no areas of controversy associated with the project or its limited environmental impact. In summary, the testimony received confirmed the accuracy of the Draft Environmental Impact Statement in identifying only limited impacts and the adequacy of the proposed mitigation measures. It was also apparent that any adverse environmental impact which might be associated with the project during the brief construction period would be of a temporary nature and insignificant when compared with the permanent environmental and social benefits which would be derived by the construction of the needed works. Even at the current advanced stage of the project, the only negative voice has been limited to a few of those who own land required for the project. Subsequent environmental studies and actions by the local sponsor have addressed these limited points of objection.

PROJECT FEASIBILITY AND FINANCING:

The complete report, supplemented by additional detailed studies, substantiates the need for the proposed project and identifies strong economic justification. The project costs and benefits reflected by the draft General Design Memorandum are as follows:

(Total First Costs: 1985)	$60,580,000	
Average Annual Costs (8-5/8% Interest)		$5,461,700
Total Average Annual Benefits:		
Flood Control	7,945,000	
Flood Proofing Costs Reduction	530,000	
Total Average Annual Benefits		$8,475,000

Benefit-Cost Ratio 1.6 to 1.0

Noteworthy, is the fact that the project is economically justified on the basis of flood damage reduction benefits alone. While other benefits are to be produced, they are not needed to produce a positive benefit-cost ratio. It should be noted that, while not included in the actual benefit calculations, the proposed project will create significant beneficial effects in the areas of water conservation, groundwater management, wildlife enhancement and recreation.

The anticipated distribution of the project costs (based on the draft General Design Memorandum and the new cost-sharing proposals) among the Federal Government, the State of California, and the local sponsor is as follows:

Federal Government	$45,435,000
State of California	8,064,000
Fresno Metropolitan Flood Control Dist. (Plus Annual O & M of $230,000)	7,081,000
Total Project Cost	$60,580,000

PROJECT COST SAVINGS:

It is significant to note that the Corps of Engineers and the local sponsor have focused efforts in maximizing project design and construction efficiency. These efforts have led to certain structural reductions and construction coordination which have produced a 29% reduction in estimated project costs (down from $84,000,000 to $61,000,000). While each of the project units meets a separate benefit/cost test, each of the units is interdependent as to hydrological operation and construction and the savings noted above is not fully achievable without the concurrent construction and operation of all project units.

PROJECT STATUS REVIEW:

Review of the completed project report by the Division Engineer resulted in his concurrence with the investigative conclusions of the District Engineer.

Upon completion of the Division Engineer's review, additional study was undertaken at the request of the Board of Engineers, that additional study similar to that normally performed during the Phase I study which follows project authorization. Unfortunately, the additional study delayed the project approximately two years causing an estimated seventeen percent increase in project costs.

During July 1980, the Board of Engineers of Rivers and Harbors forwarded to the Chief of the Corps of Engineers the completed project report and environmental impact report. The report was subsequently forwarded to the Congress as House Document 98-147, dated January 24, 1984. Subsequently, the project has undergone a third complete hydrological and economic evaluation during preparation of the General Design Memorandum. The results of this latest study have confirmed the previous results and cost savings.

The project has been included in legislation passing the House of Representatives during four sessions of the Congress. Though not enacted, the specially worded authorization reflected the awareness of Congress of the special needs associated with this project. As a result of these factors, the project has been allowed to proceed through all required investigations and design studies. The President's FY '87 budget provides for the first phase of construction which will produce immediate flood protection for the critically important Friant-Kern Canal of the Bureau of Reclamation's Central Valley Project.

The project is included in the resources development legislation passed by the House of Representatives (HR6) and is included in the bill now pending in the Senate (S1567). Timely action by Congress effecting the necessary authorization and appropriation will save as much as an additional two-year delay in the project, thereby saving the taxpayers further significant increases in project costs.

CONCLUSION: REQUEST FOR AUTHORIZATION

On June 13, 1985, twenty-nine years had elapsed since Congress first authorized the proposed Redbank-Fancher Creeks Flood Control Project modification to the Fresno County Streams Project. The need for the project has been identified in a total of eight different studies and investigations performed at both the local and federal levels. The project feasibility investigation completed in July 1977 confirms the project need and identifies strong economic justification for the project construction. Further, the more advanced and detailed technical analysis associated with the General Design Memorandum has confirmed the project's need, economic strength, the previous recommendations of the Corps of Engineers and the requests of the local community.

Because it is our belief that the proposed Redbank-Fancher Creeks Flood Control Project has met all requirements for federal participation and meets all current standards of economic justification and environmental protection, we most respectfully urge the favorable action of the Committee and Congress in authorizing the Redbank-Fancher Creeks Flood Control Project funding.

Mr. **Markarian**. Mr. Chairman, members of the committee, I am Jim Markarian. I am Chairman of the Board of Directors of the Fresno Metropolitan Flood Control District. I am authorized to speak for the Fresno Irrigation District, the County of Fresno, the cities of Clovis and Fresno.

I appreciate the committee's continuing support of the Redbank-Fancher Project in the President's budget. I thank the committee.

[The statement of Mr. Markarian follows:]

Markarian

BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
THE HONORABLE TOM BEVILL, CHAIRMAN

STATEMENT OF JIM MARKARIAN, FRESNO, CALIFORNIA

MR. CHAIRMAN, AND MEMBERS OF THE COMMITTEE:

My name is Jim Markarian and I am Chairman of the Board of Directors of the Fresno Metropolitan Flood Control District of Fresno County, California, the local sponsor for the Redbank-Fancher Creeks Flood Control Project, a modification to the previously authorized Fresno County Streams, California project. I am authorized to speak on behalf of the County of Fresno, the Cities of Fresno and Clovis, and the Fresno Irrigation District. In addition, the California legislature has passed and the Governor has signed legislation approving the project and authorizing State financial participation.

We respectfully request that project construction be retained in the FY 86-87 budget in an amount not less than the $2,000,000 provided in the President's budget. The subject construction element will provide immediate flood protection to the Friant-Kern Canal of the important Central Valley Project.

The Redbank-Fancher Creeks Project was initially identified in the Big Dry Creek project investigation of 1940 and the resulting Fresno County Streams project authorization. In 1956, the Congress specifically authorized investigation of the project modification relating to the Redbank,Fancher, and Big Dry Creeks stream system. Unfortunately, federal funds were not appropriated until the disasterous 1969 floods. The completed investigation proves the project to be both economically justified and environmentally sound.

The Redbank-Fancher Creeks Project is economically justified on the basis of flood damage prevention alone. Though other benefits accrue, they are not required to produce a positive benefit/cost ratio. The project will provide protection to 57,000 acres containing a population in excess of 120,000. The final benefit/cost ratio is estimated near 2:1 at an 8-5/8% interest rate. Estimated average annual flood damages exceed $14,000,000 and affect both urban and agricultural land. The project will also protect an open irrigation canal system which transverses 210,000 acres of the world's most productive agricultural lands, Fresno County's gross annual production recently exceeding 2.0 billion dollars. The project will control the historic flooding which has seen the stream and canal systems overflow an average of once every four years since 1953.

In July 1980, the investigation report was forwarded to the Chief of the Corps of Engineers, being subsequently forwarded to the Congress as House Document 98-147. The project has been included in authorization legislation passing the House of Representatives during three recent sessions of Congress. Though not enacted, the specially worded authorization reflected the awareness of the project's special needs. The project is now included within S. 1567 and H.R. 6, both authorizing project construction. Congressional action effecting the requested appropriations is critical in that it will prevent further flood damage and increases in project costs.

We appreciate the privilege of appearing before the Committee and the past support given the project. We urge your continued support and ask that our statement and the attached detailed presentation be made a part of the hearing record.

BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
THE HONORABLE TOM BEVILL, CHAIRMAN

STATEMENT OF JIM MARKARIAN, FRESNO, CALIFORNIA

The people of the central county area of Fresno County, California are deeply appreciative of the opportunity to have the presentations of their representatives heard by the honored members of the Congress. While the Redbank-Fancher Creeks Flood Control Project is not large by some standards, it is critically important to the Fresno-Clovis metropolitan area which is the business center of the most productive agricultural county in the world, gross annual production recently exceeding 2.0 billion dollars.

This report, first submitted in May 1971, has been prepared to substantiate the continuing vital need for flood control works specified in the Redbank and Fancher Creeks project report.

AUTHORIZATION:

The Redbank-Fancher Creeks project is a modification of the existing Fresno County Streams, California authorization incorporating the enlargement of the Big Dry Creek Dam and the containment of the balance of the stream group.

The Congress, on June 13, 1956, authorized the Corps of Engineers to reinvestigate the stream group project, this following the major floods of 1955 and 1956. Unfortunately, funds were not provided and the Corps did not begin the investigation until the area had suffered its worst flooding in history during January and February 1969. The release of funds and the start of the investigation occurred in July 1970, some fourteen years after Congressional authorization. Unfortunately, the floods of 1986 find the final authorization still pending.

PROJECT LOCATION AND NEED:

Redbank, Fancher, and Big Dry Creeks of the Fresno County Stream Group, their tributaries and related streams addressed by the project, are located on the western slope of the Sierra Nevada mountains. The watershed encompasses some one hundred seventy-five square miles and generates storm runoff which flows through the heart of the metropolitan area. The flows impact directly on the open irrigation canal system which transverses some 210,000 acres of the world's most productive agricultural land and 45,000 acres of a densely developed urban community with a population in excess of 350,000.

It is currently estimated that the floodplain to be protected by the proposed project includes 57,000 acres with a population of 120,000 (1982) and a market value in excess of 2.4 billion dollars. Total estimated average annual flood damages exceed $14,000,000 and affect both urban and agaricultural properties.

HISTORY OF FLOODING:

As a result of the uncontrolled nature of the subject stream group, flooding has occurred frequently. Floods of record occurred in March 1938, December 1955, January 1956, January 1969, February 1969, March 1978, and January 1983. In addition, available records indicate flooding of lesser severity occurred in 1914, 1915, 1916, 1937, 1958, 1965, 1972, 1977, and 1986 with the streams and irrigation canal system overtoppoing their banks on the average of once every four years since 1953.

Although the recent floods which occurred in March 1978, January 1983, and February 1986 were of a lesser magnitude than those of 1969, thousands of dollars in damages to private homes, public roads, irrigation facilities and hundreds of acres of prime agricultural lands were experianced. Such floods again demonstrated the urgent need for immediate construction of flood control works.

LOCAL SUPPORT:

Following the floods which occurred in January and February 1969, the Fresno area was declared a part of California's disaster area. With the realization that millions of dollars in flood damages could have been prevented and that a recurrence of such floods would be even more devastating, a public hearing on the needed flood control works was held on February 28, 1969. Hundreds of the community's citizens representing some seventy-five public and private organizations met and drafted resolutions to the U.S. Army Corps of Engineers and legislative representatives urging the active pursuit of Redbank-Fancher Creeks Flood Control Project. Subsequently, the County of Fresno, the Cities of Fresno and Clovis, the Fresno Metropolitan Flood Control District, and the Fresno Irrigation District, authorized direct work with the Corps of Engineers and the Congress to secure adequate flood protection for the Fresno-Clovis metropolitan area.

In an effort to ensure the availability of lands needed for the required flood control structures, the County of Fresno acting jointly with the Fresno Metropolitan Flood Control District did, on October 22, 1974, effect open-space and conservation zoning of approximately 500 acres. More recently, the Cities of Clovis and Fresno, the County of Fresno, and the Fresno Metropolitan Flood Control District, signed contracts appropriating $335,000 per year to acquire the necessary project lands. Project land acquisition is now well underway.

Relatedly, the California Water Commission has historically supported and continues to support the project. Further, the State Reclamation Board has submitted a supporting letter of intent for local assurances. Most recently, the California Legislature has passed and the Governor has signed legislation authorizing State support of and financial participation in the project.

At the local level, a broadly based Citizens Project Advisory Committee has been created by the Flood Control District. The Committee and the sixteen community organizations and agencies it represents have reviewed and confirmed the project's need and design features. The Committee has also structured a financing plan to ensure the availability of the required local cost share and the equitable distribution of those costs.

ENVIRONMENTAL CONSIDERATIONS:

Upon completion and distribution of the Draft Feasibility Report and Draft Environmental Impact Statement, a public hearing was held within the project area by the Fresno Metropolitan Flood Control District, the local project sponsor, and the U.S. Army Corps of Engineers. Testimony submitted during the subject hearing indicated that there have been no areas of controversy associated with the project or its limited environmental impact. In summary, the testimony received confirmed the accuracy of the Draft Environmental Impact Statement in identifying only limited impacts and the adequacy of the proposed mitigation measures. It was also apparent that any adverse environmental impact which might be associated with the project during the brief construction period would be of a temporary nature and insignificant when compared with the permanent environmental and social benefits which would be derived. Even at the current advanced stage of the project, the only negative voice has been limited to a few of those who own land required for the project. Subsequent environmental studies and actions by the local sponsor have addressed these limited points of objection.

PROJECT FEASIBILITY AND FINANCING:
The complete report, supplemented by additional detailed studies, substantiates the need for the proposed project and identifies strong economic justification. The project costs and benefits reflected by the draft General Design Memorandum are as follows:

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Benefit/Cost Ratio	1.6 to 1.0	

Noteworthy, is the fact that the project is economically justified on the basis of flood damage reduction benefits alone. While other benefits are to be produced, they are not needed to produce a positive benefit/cost ratio. It should be noted that, while not included in the actual benefit calculations, the proposed project will create significant beneficial effects in the areas of water conservation, groundwater management, wildlife enhancement and recreation.

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Total Project Cost	$60,580,000

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It is significant to note that the Corps of Engineers and the local sponsor have focused efforts in maximizing project design and construction efficiency. These efforts have led to certain structural reductions and construction coordination which have produced a 29% reduction in estimated project costs (down from $84,000,000 to $61,000,000). While each of the project units meets a spearate benefit/cost test, each of the units is interdependent as to hydrological operation and construction and the savings noted above is not fully achievable without the concurrent construction and operation of all project units.

PROJECT STATUS REVIEW:
Review of the completed project report by the Division Engineer resulted in his concurrence with the investigative conclusions of the District Engineer.

Upon completion of the Division Engineer's review, additional study was undertaken at the request of the Board of Engineers, that additional study similar to that normally performed during the Phase I study which follows project authorization. Unfortunately, the additional study delayed the project approximately two years causing an estimated seventeen percent increase in project costs.

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The project is included in the resources development legislation passed by the House of Representatives (H.R. 6) and is included in the bill now pending in the Senate (S. 1567). Timely action by Congress effecting the necessary authorization and appropriation will save as much as an additional two-year delay in the project, thereby saving the taxpayers further increases in project costs.

CONCLUSION: REQUEST FOR AUTHORIZATION
On June 13, 1985, twenty-nine years had elapsed since Congress first authorized the proposed Redbank-Fancher Creeks Flood Control Project modification to the Fresno County Streams Project. The need for the project has been identified in a total of eight different studies and investigations performed at both the local and federal levels. The project feasibility investigation completed in July 1977 confirms the project need and identifies strong economic justification for the project construction. Further, the more advanced and detailed technical analysis associated with the General Design Memorandum has confirmed the project's need, economic strength, the previous recommendations of the Corps of Engineers and the requests of the local community.

Because it is our belief that the proposed Redbank-Fancher Creeks Flood Control Project has met all requirements for federal participation and meets all current standards of economic justification and environmental protection, we most respectfully urge the favorable action of the Committee and Congress in authorizing the Redbank-Fancher Creeks Flood Control Project funding.

Mr. Cologne. Mr. John Freshman will file his report.

Next is Mayor Larry Bagley of Oceanside, referred to earlier by Congressman Packard.

Mr. Bagley. I have appeared before this committee before on this same project. I have no apparent conflicts of interest. I can thoroughly endorse them.

I would point out this project was first authorized in 1968, and since that time this portion of the San Luis Rey Valley has been represented by five different Congressmen, all of whom have fully supported the project, including Congressman Badham, who testified earlier today, and Clair Burgener, a member of this committee for several years.

I would only say that we have committed the resources of the city to funding this project to our maximum extent. We will participate in the local share, and we need the project desperately.

I have filed written testimony. With that, I would thank this committee for their past support of this project. You did support it last year. I would ask your support for $1.5 million to get this project started this year.

Thank you.

[The statement of Mr. Bagley follows:]

⑤

CITY OF OCEANSIDE

MAYOR
LARRY M. BAGLEY

DEPUTY MAYOR
DR. JOHN MACDONALD

COUNCIL MEMBERS
WALTER A. GILBERT
TED MARIONCELLI
SAM WILLIAMSON

TESTIMONY TO HOUSE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE

OCEANSIDE SAND BYPASS SYSTEM

The City of Oceanside is grateful for the Committee's continuing support for the Oceanside Sand Bypass System. The Administration has proposed an appropriation of $1,918,000 in FY '87 for operation and monitoring of the bypass system.

The technology developed at Oceanside Harbor has the potential for revolutionizing harbor maintenance procedures and reducing federal dredging costs nationwide.

The City of Oceanside is proud to continue in its partnership with the Federal government in implementing this important project.

Thank you.

Larry M. Bagley

LARRY M. BAGLEY
Mayor

CIVIC CENTER • 321 NORTH NEVADA • OCEANSIDE, CA 92054 • TELEPHONE 619-439-7304

Mr. COLOGNE. That concludes our witnesses.

I would be remiss if I did not make one more comment. That is, we, in California, are very fortunate to have Vic Fazio on your committee and doing so much work for the entire State of California. We look to him as our leader in water projects. He has addressed these problems without regard to partisanship or areas. He has sought to solve our problems in California on a rational and good basis. We are happy to have him in that role.

Mr. MYERS. We appreciate your sharing him with us. He is not only valuable to you, but to us, also.

I could not help but note the support for the President's budget here. It was overwhelming, almost. We haven't heard much of that.

Mr. COLOGNE. We recognize the economics of the situation today. We are trying our best to hold it within the guidelines set by the President.

Mr. BEVILL. We share your comments about Vic Fazio. We look to Mr. Fazio to help us with many of our problems that we face. We appreciate him, too. As a matter of fact, he not only looks out for California, but he is good for the whole nation.

We appreciate the way you handled this presentation. You expedited it and saved us time. We don't have that happen very often. So, we appreciate the manner in which you coordinated it.

Mr. COLOGNE. We have two members of our commission here, Stan Barnes and Claire Hill, who have been here in the past, and Orville Abbott, our executive officer, has done a landmark job in putting this all together.

Mr. BEVILL. I know you always do. You have everyone that came from your area there, and their names will be in the record to show they did take time off from their businesses and at their expense to come out here.

Mr. COLOGNE. Thank you.

[The additional statements follow:]

STATEMENT OF JEROME B. GILBERT
GENERAL MANAGER
EAST BAY MUNICIPAL UTILITY DISTRICT
AT HEARINGS BEFORE THE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
UNITED STATES HOUSE OF REPRESENTATIVES
ON PUBLIC WORKS APPROPRIATIONS BILL OF FY 1986-87

April 9, 1986

Honorable Tom Bevill, Chairman

Mr. Chairman and Members of the Committee:

The East Bay Municipal Utility District, which supplies water for municipal and industrial uses to 1.1 million people in a 300-square-mile area of Alameda and Contra Costa Counties on the eastern side of San Francisco Bay, supports the California Water Commission's recommendations regarding appropriations for Federal Flood Control and Reclamation Programs in California for fiscal year 1986-87.

Specifically, the District urges appropriation for the following project (reference California Water Commission Summary dated March 10, 1986).

No. 47	Auburn-Folsom South Unit	$1,000,000

The District recommends that your Committee consider increasing its support for Auburn Dam from $1,000,000 to $5,000,000 to fund the clean up of the cofferdam that was breached during the February 1986 floods and restoration of the American River Canyon to a safe condition. The 3,000,000 cubic yards of material remaining in the river channel from the cofferdam should be leveled off and reduced to a stable condition before it is washed downstream by future high flows and obstructs the lower American River and the Sacramento River.

The District has a twofold interest in the completion of the Auburn-Folsom South Project: first, as a contractor for project water; and second, as an indirect beneficiary of water imported to that portion of the Folsom South service area which lies downstream from the District's primary water source reservoirs in the Mokelumne River basin.

Extensive groundwater pumping in the vicinity of the lower Mokelumne River is causing substantial seepage loss, much of which must be replaced by releases of water stored by East Bay Municipal Utility District for its own use. As these seepage losses increase, the dependable yield of the District's Mokelumne River Project is reduced proportionately. Since the Mokelumne River Project supplies more than 90 percent of the District's water, the project yield is of major concern.

For thirty years, the expected solution to this problem has been an imported surface supply from the Auburn-Folsom South Project. San Joaquin County agricultural interests along the lower Mokelumne River have also looked to this project to meet their long-term water requirements. Currently the District provides storage, on an interim basis, to some of these agricultural interests. Without the Auburn-Folsom South Project, their water requirements will eventually have to be met from groundwater. The Eastern San Joaquin County Groundwater Study completed in 1985 has found that continued pumping on this already critically overdrafted groundwater basin will result in continued decline in the groundwater table and additional advancement of the saline front. This consequence could prove disastrous to agriculture and the local communities. The computer model developed in the groundwater study will provide information as to the best use and best place for use for the imported surface supply from the Folsom South Canal.

The East Bay Municipal Utility District believes it is most important that the Auburn-Folsom South Unit of the Central Valley Project be constructed at the earliest possible date. Auburn Dam, when completed, will signficantly reduce the likelihood of flooding in the Sacramento area. The need for additional flood protection has once again been dramatically demonstrated by a series of major storms in February. In an effort to ensure the timely completion of the Auburn-Folsom South Unit, the District's Directors have expressed an interest in participating in the construction of the power function of Auburn Dam and the extension of the Folsom South Canal.

For the above reasons, East Bay Municipal Utility District seeks your Committee's support for this project.

JBG:JAM:jmm

UNITED WATER CONSERVATION DISTRICT
725 E. Main St., Ste. 301 • Santa Paula, California • 93060
P.O. Box 432 • Phone 805 • 525-4431

United States House of Representatives
Committee on Appropriations, Sub-Committee
on Energy and Water Development
Honorable Tom Bevill, Chairman

STATEMENT

by

Thomas F. Dullam, Jr., President
United Water Conservation District
Ventura County, California

Project: Freeman Diversion Improvement Project

Request: Provision for $570,000 of Appropriation in the Bureau of Reclamation's FY 86-87 Federal Budget.

Purpose: To provide funding, under a PL 84-984 Small Projects Act Loan, for use in initiating final design and project construction in FY 86-87.

March 30, 1986

STATEMENT

Honorable Tom Bevill, Chairman

My name is Thomas F. Dullam, Jr. I am President of the United Water Conservation District Board of Directors.

I am here to request that you give every possible consideration to the inclusion of $570,000 in the FY 86-87 Federal Budget to provide urgently needed funding for initiating construction of the Freeman Diversion Improvement Project.

Under a Joint Powers Agreement, the County of Ventura and the United District are committed to resolving this problem, and are cooperatively engaged in the Seawater Intrusion Abatement Program. Phase I of that program is nearing completion at a cost of $15 million, funded almost equally from State and local monies. Environmental issues have resulted in costly delays on implementing Phase II, the Freeman Diversion Improvement Project. The problem is one of extreme urgency and it is imperative that Phase II proceed without further delay.

A Project Summary of the very serious problem of Seawater Intrusion is appended. Your further review of the problem and the urgency of our funding needs is respectfully requested.

Thank you for the opportunity of appearing before you today to request your consideration for assistance in this critical matter.

GIW/ct
March 30, 1986

PROJECT SUMMARY

PROJECT TITLE. FREEMAN DIVERSION IMPROVEMENT PROJECT

APPLICANT. United Water Conservation District of
Ventura County, California

PROBLEM AND LOCATION. Seawater Intrusion on the Oxnard Coastal Plain, Ventura County, California, acknowledged to be by far the most severe problem of its kind in the state.

PROJECT PURPOSE. To increase diversions of Santa Clara River waters for use in controlling the advance of seawater intrusion into the underground aquifers of the Oxnard Plain.

PROJECT AREA AND POPULATION.

Urban Area	30,050 Acres
Irrigated Agriculture	39,150 Acres
Total Area	69,200 Acres
Total Population	162,000

ESTIMATED COST AND FINANCING PLAN.

Total Project Costs:	$19,556,000
Financing: Federal loan, under the Small Reclamation Projects Act, PL 84-984, as amended.	
Total Appropriation Requirement:	$18,227,300

APPROPRIATION REQUEST FOR FY 86-87. The amount of $570,000 is requested for appropriation in FY 86-87 to initiate final design and construction.

URGENCY FOR RESOLVING PROBLEM. Seawater has already intruded into the freshwater aquifers underlying 25% of the Oxnard Coastal Plain, as depicted on Figure I appended as the last page of this statement. Its further advance must be halted without delay, which is vital to preserving and maintaining the economy of the entire area.

March 30, 1986

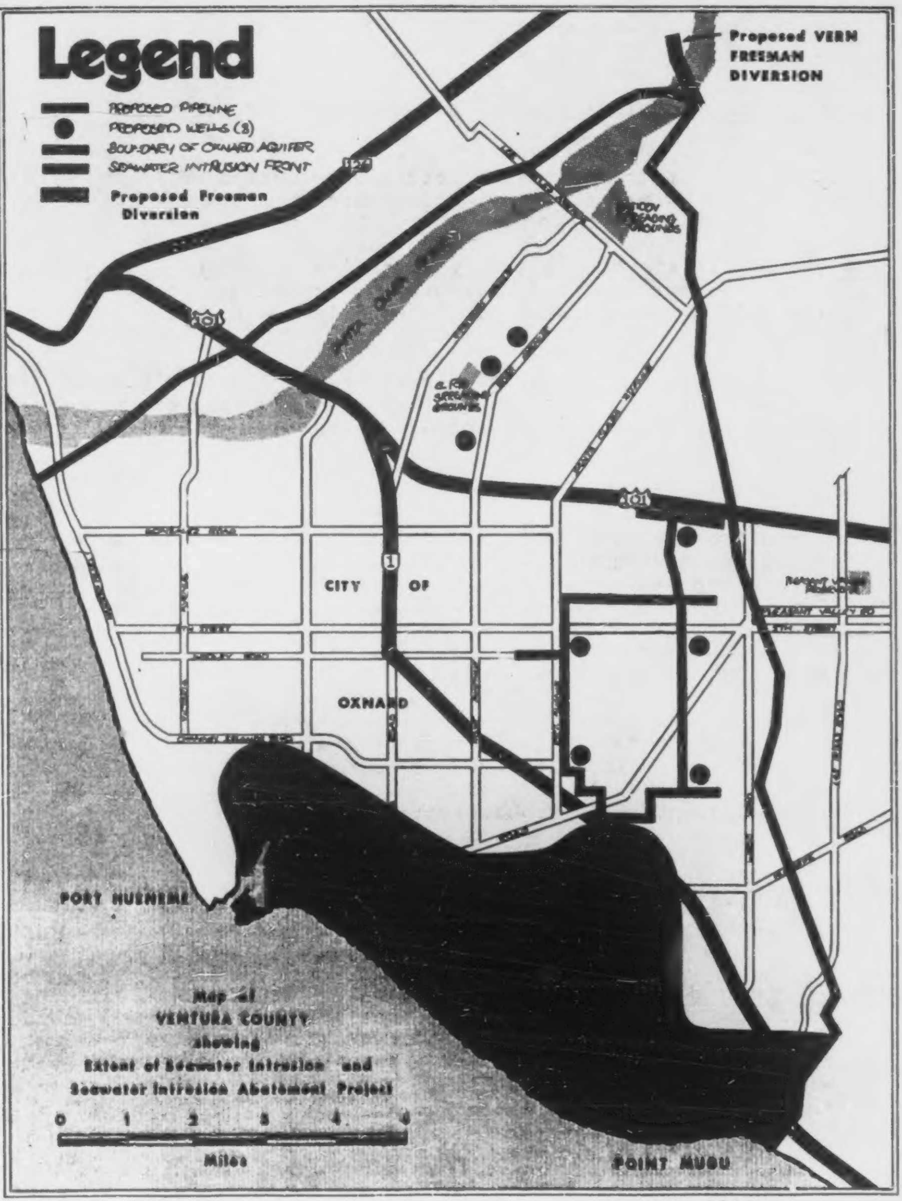
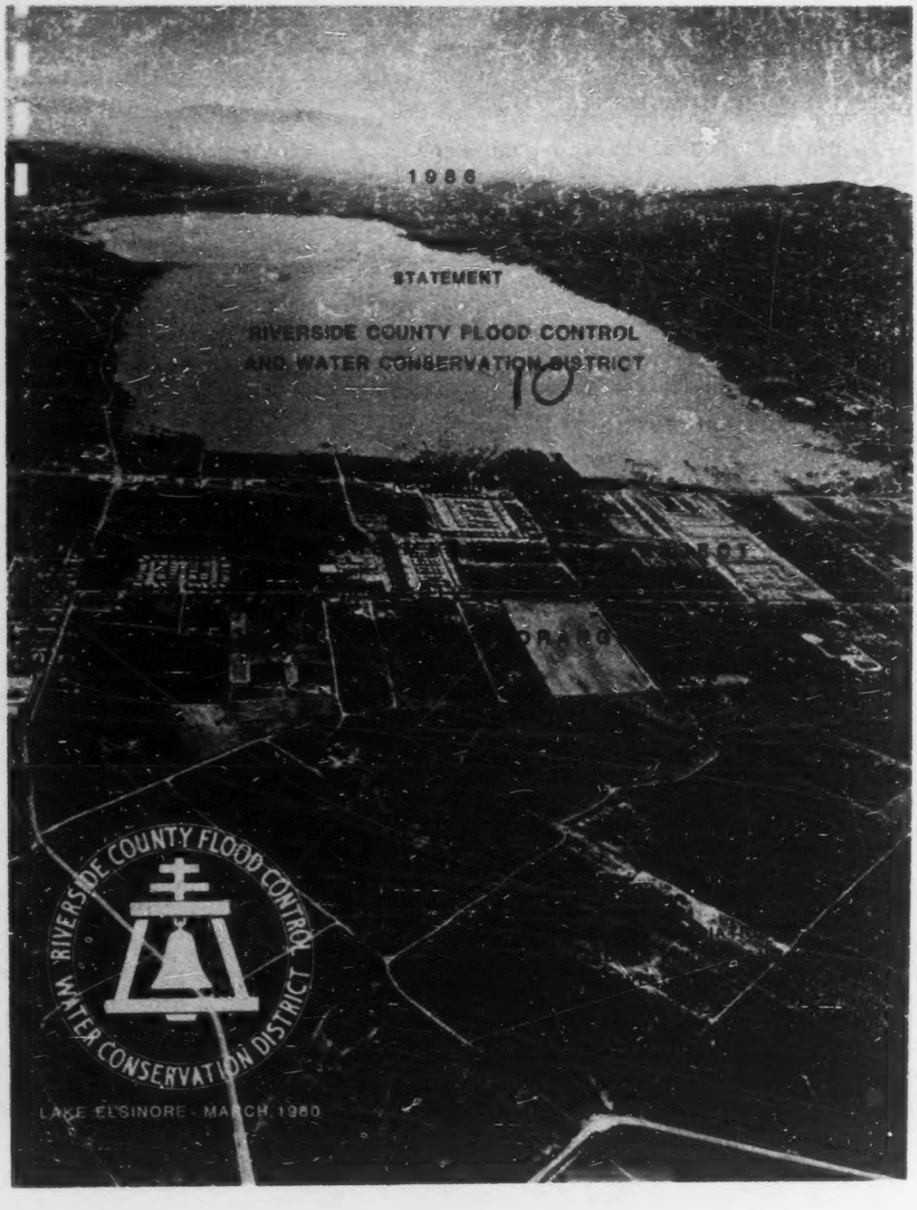

Legend
PROPOSED PIPELINE
PROPOSED WELLS (8)
BOUNDARY OF OXNARD AQUIFER
SEAWATER INTRUSION FRONT
Proposed Freeman Diversion
Proposed VERN FREEMAN DIVERSION
126
101
1
CITY OF OXNARD
PORT HUENEME
POINT MUGU
Map of
VENTURA COUNTY
showing
Extent of Seawater Intrusion and
Seawater Intrusion Abatement Project
0
1
2
3
4
5
Miles

FIG. I



1986

STATEMENT

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

10

LAKE ELSINORE - MARCH, 1980

SUMMARY RECOMMENDATIONS

LAKE ELSINORE MANAGEMENT PROJECT	
(Bureau of Reclamation Loan Program)	$ 1,000.000
SANTA ANA RIVER - MAIN STEM	
Phase II Studies	$ 3,500,000
SANTA ANA RIVER AND ORANGE COUNTY	
Continue Surveys	$ 600,000

Respectfully submitted,

Walt Abraham

WALT ABRAHAM, Chairman
Board of Supervisors
Riverside County Flood Control
and Water Conservation District

LAKE ELSINORE MANAGEMENT PROJECT
(Bureau of Reclamation Loan Program)

The Elsinore Valley Municipal Water District, the County of Riverside and the State of California, Department of Parks and Recreation, cooperated in the preparation of a study and report of the problems in stabilizing Lake Elsinore through flood control and water development improvements and enhancing the recreational opportunities of the lake under the provisions of the Small Reclamation Projects Act of 1956 (Public Law 84-984) as amended. The results of that study and report were that flood control improvements, water supply development, modification to operational size of the lake and recreational improvements were feasible.

The Elsinore Valley Municipal Water District, acting as the local sponsor, submitted the report entitled, Proposed Lake Elsinore Management Project, to the Bureau of Reclamation as an application for a loan and grant of $26,000,000 for this 39.5 million dollar project. The Secretary of Interior approved the loan and grant application in March 1985.

The Corps of Engineers completed a reconnaissance study in December 1985 under the provisions of Section 205 of the Flood Control Act of 1948 determining that certain flood control improvements along the lake outflow channel were feasible. The Riverside County Flood Control and Water Conservation District has entered into a project design study cost sharing agreement with the Corps of Engineers to complete the feasibility - design of the outflow channel in advance preparation for construction of the project as a Small Flood Control Project.

The Lake Management Plan which includes water development, lake stabilization and recreation will be closely interfaced with the Corps' flood control plan. It is vital that the design of these two projects go forward concurrently.

The President has included $1,000,000 in the FY 1987 budget for the Bureau of Reclamation for continued engineering design of the Lake Elsinore Management Plan. We support the President's budget recommendation and urge the Committee to approve $1,000,000 for the Lake Elsinore Management Project loan in FY 1987.

SANTA ANA RIVER - MAIN STEM

The report of Santa Ana River - Main Stem, including Santiago Creek, California, Phase I, has been completed and the Chief of Engineers submitted that report to the Secretary of the Army. His report recommends construction of the All River Plan which consists of a dam near Mentone, California; enlargement of the existing Prado Dam near Corona, California; channel improvements along the river in Orange County; improvement of the Oak Street drain channel in Corona, California; and improvement of Santiago Creek in Orange County. The All River Plan was developed over a period of several years of study by the Corps of Engineers and agreed to in concept by the three affected counties, i.e., Orange, Riverside, and San Bernardino, and the State of California. Subsequent to completing the Phase I report on the Santa Ana River, All River Plan, certain interests in San Bernardino County expressed concerns over the Mentone Dam. The Boards of Supervisors of Orange, Riverside, and San Bernardino Counties, after meetings and discussions with the Corps of Engineers, agreed on language authorizing the project.

In December 1985 the Los Angeles District of the Corps of Engineers, under authority of Section 1304 of the 1984 Supplemental Appropriations Act, submitted a final report of Flood Storage Alternatives to the Mentone Dam. In that report the Corps recommends construction of a dam across the Santa Ana River upstream of the Mentone Dam site at a cost of 200 million dollars less than the Mentone Dam, with only slightly reduced total project benefits. The three counties have approved this alternate damsite.

The House has passed HR 6, an authorization bill containing the Santa Ana River project, and the Senate has passed S1567 containing the Santa Ana River project. Both bills have language to include the alternative to Mentone Dam, upon approval of the plan by the Chief of Engineers and Secretary of Army. We believe the Santa Ana River - Main Stem Project will be authorized by Congress this year.

It is vital that engineering design on this project continue so that construction can start in a timely manner after authorization. The President has included 3.5 million dollars in the FY 1987 budget. We support the President's budget recommendation and urge the Committee to approve $3,500,000 for the Santa Ana River - Main Stem Project for FY 1987.

SANTA ANA RIVER AND ORANGE COUNTY

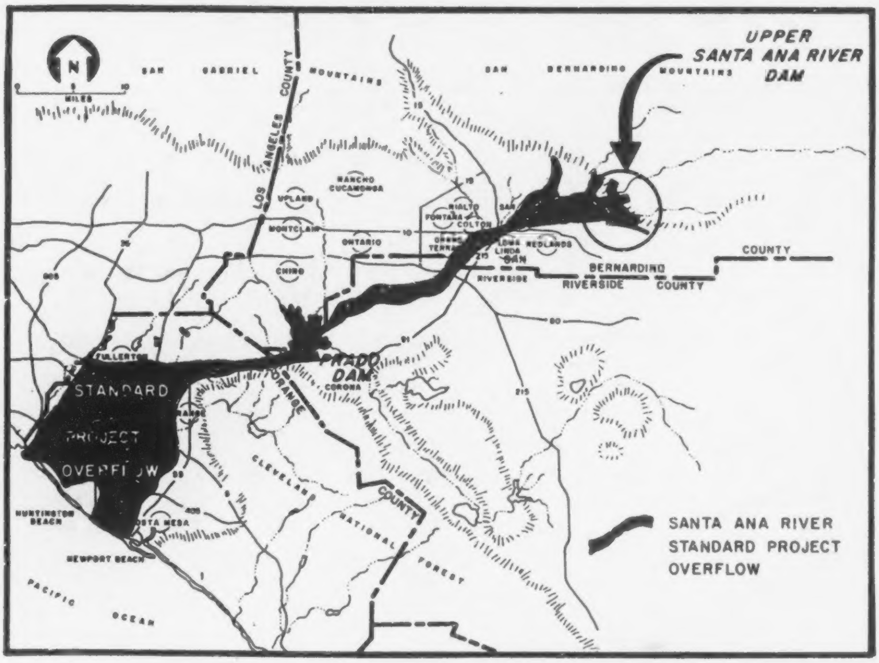
The Corps of Engineers has been studying certain specific flooding problems along streams tributary to the Santa Ana River and in Orange County since the mid 1970's. For the past three years they have concentrated efforts on a study of the flooding problems around Lake Elsinore in Riverside County. This study has resulted in the Corps and the Riverside County Flood Control and Water Conservation District proceeding with a Small Flood Control Project design at Lake Elsinore under provisions of Section 205 of the Flood Control Act of 1948.

There are also continuing studies that must be completed on other streams in Orange County (Interim Report No. 3) and tributary streams to the Santa Ana River in Riverside and San Bernardino Counties (Interim Report No. 2). Included in Interim Report No. 2 are studies of the feasibility of extending the levee along the San Jacinto River approximately four miles farther downstream. Flooding occurred along this reach of the river in 1978, 1979, 1980 and 1983 which required flood fight effort to keep the stream within the existing banks. The flood of February 1980 breached the local levees and caused extensive flooding damages to valuable agricultural land, closed major roads and highways, destroyed one major county road and caused considerable economic losses in the Hemet-San Jacinto Valley in Riverside County. Riverside County, including this area, is the fastest growing area in the United States. Future floods will cause even greater economic loss.

The President's budget includes $600,000 for continuation and completion of these and other elements of this ongoing study. We urge the Committee to approve $600,000 for the Santa Ana River and Orange County studies for FY 1987.

COUNTY OF SAN BERNARDINO FLOOD CONTROL PROGRAM
F.Y. 1986-87

HOUSE of REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN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MILES
SAN GABRIEL MOUNTAINS
SAN BERNARDINO MOUNTAINS
UPPER SANTA ANA RIVER DAM
LOS ANGELES COUNTY
RANCHO CUCAMONGA
UPLAND
MONTCLAIR
ONTARIO
CHINO
RIALTO
FONTANA
COLTON
SAN
GRAND TERRACE
LOMA LINDA
REDLANDS
DAM
RIVERSIDE
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
FULLERTON
STANDARD PROJECT OVERFLOW
PRADO DAM
CORONA
ORANGE COUNTY
CLEVELAND NATIONAL FOREST
HUNTINGTON BEACH
COSTA MESA
NEWPORT BEACH
PACIFIC OCEAN
SANTA ANA RIVER STANDARD PROJECT OVERFLOW

SANTA ANA RIVER MAINSTEM

UPPER SANTA ANA RIVER DAM - DESIGN AUTHORIZATION REQUESTED

San Bernardino County
FLOOD CONTROL DISTRICT
State of California

Board of Supervisors
County of San Bernardino

Robert L. Hammock
Chairman
Supervisor, Fifth District
ADRIENNE E. GAINES
Executive Assistant
ESTHER E. PERCHAN
Executive Assistant
JO ANNE M. WILLIAMS
Administrative Assistant

March 31, 1986

The Honorable Tom Bevill, Chairman
United States House of Representatives
Committee on Appropriations
Subcommittee on Energy and Water
Development
Washington, D.C. 20515

Dear Chairman Bevill:

The Board of Supervisors of the San Bernardino County Flood Control District, State of California, is deeply appreciative of the Committee's past consideration and budgetary recommendations which have resulted in control of serious flood problems in our County. This year we are quite aware of the fiscal limitations faced by all levels of government throughout the nation and, therefore, are submitting only the following most critical projects for your consideration in the 1986-87 Budget:

1.	Santa Ana River Main Stem - All River Plan	$3,500,000
2.	Santa Ana River and Orange County Review Final Report	150,000

The work reflected in these projects is essential and urgent to both local and national interests. Additional information on each project is included with this report for your review as time permits.

We earnestly solicit your approval of these programs and their funding to provide for the most urgent flood control requirements of San Bernardino County.

Respectfully yours,

ROBERT L. HAMMOCK, Chairman
Board of Supervisors

San Bernardino County Government Center • 385 North Arrowhead Avenue • San Bernardino, CA 92415-0110 • (714) 383-2613

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

DEL ROSA PROJECT
UPPER SANTA ANA RIVER DAM SITE
IMPROVEMENT

SAN BERNARDINO VALLEY FEDERAL FLOOD CONTROL PROGRAM

▬ SANTA ANA RIVER MAIN STEM "ALL RIVER PLAN"

GOAL	PROCEDURE	REQUIRED ACTION	SCHEDULE
Reduce major flooding from Santa Ana River within three Southern California counties	Construct major flood control storage and conveyance facilities	Initiate detail design studies on the Upper Santa Ana River Dam and continue detail design studies from Prado Dam downstream	86/87 a) Continue detail design on lower Santa Ana River b) Initiate detail design on Upper Santa Ana River 88/89 Final G.D.M. approval 89/90 Initiate construction Required F.Y. 86/87 Design Funds $ 3,500,000

▬ SANTA ANA RIVER AND ORANGE COUNTY FINAL REPORT

GOAL	PROCEDURE	REQUIRED ACTION	SCHEDULE
Reduce flooding on Santa Ana River upstream tributaries in San Bernardino County	Construct flood facilities along major upstream Santa Ana River tributaries	Complete general investigation for Del Rosa Channel $ 150,000	86/87 Complete report 88/89 Initiate recommendation Required F.Y. 86/87 Survey Study Funds Del Rosa investigation $ 150,000

SANTA ANA RIVER MAIN STEM

ALL RIVER PLAN INCLUDING UPPER SANTA ANA RIVER DAM

The Santa Ana River is capable of large peak storm flows that rival or exceed the peak flows of many of the nation's major perennial flowing rivers. If left in its existing state, it could cause an estimated $9.2 billion in damage and would jeopardize the lives of over 1.8 million people.

The All River Plan strongly supported by the three counties of Riverside, Orange and San Bernardino, in addition to provide flood protection for Orange County, serves a two-fold purpose. First, it would provide major flood protection for upstream portions of the river in San Bernardino and Riverside Counties. Secondly, it will reduce the large rights-of-way acquisition at Prado Dam that is needed to provide downstream flood protection for Orange County.

The $3.5 million in the President's Budget and recommended by the State of California Water Commission, is to continue detailed design activities for Prado Dam and downstream elements and initiate detailed designs of the Upper Santa Ana River Dam.

PROJECT AUTHORIZED:	Public Law 94-587, Section 109, 94th Congress, Second Session, Approved on October 22, 1976.
TOTAL PLANNING AND ENGINEERING FUNDS REQUIRED:	$17,300,000
PRIOR PLANNING AND ENGINEERING FUND:	$13,025,000
STATE OF CALIFORNIA WATER COMMISSION RECOMMENDATIONS Fiscal Year 1986-87:	$3,500,000
PRESIDENT'S BUDGET Fiscal Year 1986-87:	$3,500,000
REQUIRED ACTION:	Approval of $3,500,000 by Appropriations Committees and Congress. 1. To continue detailed design activities for Prado Dam and downstream elements. 2. To initiate detailed design of the Upper Santa Ana River Dam.

SANTA ANA RIVER AND ORANGE COUNTY REVIEW REPORT

FINAL REPORT

On May 9, 1964, the House of Representative Committee on Public Works authorized this review report to study the Santa Ana River Basin and tributaries in the California Counties of San Bernardino, Riverside and Orange. This study includes numerous Santa Ana River tributaries in the three-county area. Since its initiation, various streams within this overall project have been studied in detail, as the urgency and need required.

This year because of the fiscal limitations faced by all levels of government throughout the nation, we are recommending deferral of studies on the other tributaries in our County in favor of funding the Del Rosa Channel. This facility presently serves as the primary drainage outlet for the rapidly growing City of San Bernardino and has caused frequent flood damage to the hurt of the City.

Funding of $50,000 is currently proposed in the President's budget. However, the California State Water Commission has recognised the urgent need and vitality of this project and supported $150,000 funding. We encourage your concurrence and recommendations.

SURVEY AUTHORIZED:	Review report authorized by Resolution of the House of Representative Committee on Public Works, adopted May 8, 1964.
TOTAL FUNDS REQUIRED:	$9,500,000 (1)
PRIOR SURVEY FUNDS APPROVED:	$7,777,000 (2)
STATE OF CALIFORNIA WATER COMMISSION RECOMMENDATIONS Fiscal Year 1986-87 Del Rosa Channel:	$150,000
PRESIDENT'S BUDGET Fiscal Year 1986-87:	$50,000
REQUIRED ACTION:	Approval of the Appropriations Committees and Congress in Fiscal Year 1986-87 of $150,000 to continue general investigation and technical studies for the Del Rosa Channel.

1. San Bernardino County survey portions include upstream elements, San Timoteo Creek and tributaries (San Timoteo Creek-Loma Linda, Redlands, Zanja, Wilson and Wildwood Creeks), Warm Creek and tributaries, San Sevaine Creek and tributaries, and Rialto Channel.
2. Includes $425,000 previously allotted to Bureau of Reclamation (Department of Water and Power Resources).

APPENDIX

MINUTES OF THE BOARD OF SUPERVISORS
OF SAN BERNARDINO COUNTY, CALIFORNIA

On motion of Supervisor McElwain, duly seconded by Supervisor Riordan, and carried, the following resolution is adopted by the Board of Supervisors of the County of San Bernardino, State of California:

RESOLUTION NO. 86-84

WHEREAS, on March 7, 1986, the State Water Commission will adopt final recommendations for Fiscal Year 1986-87 funding for water and flood control projects; and

WHEREAS, these recommendations will be submitted to the Congressional Appropriations Committee; and

WHEREAS, there are several projects needed to solve serious flood control problems in San Bernardino County;

NOW, THEREFORE, BE IT RESOLVED that the San Bernardino County Board of Supervisors strongly supports and recommends the following projects:

PROJECT	PRESIDENT'S BUDGET	S.B. COUNTY RECOMMENDATION MAR. 3, 1986
U.S. ARMY CORPS OF ENGINEERS		
1. SANTA ANA RIVER MAIN STEM - "ALL RIVER PLAN" INCLUDING ALTERNATIVES ABOVE PRADO DAM General Investigation	$3,500,000	$3,500,000
2. SANTA ANA RIVER AND ORANGE COUNTY FINAL REPORT General Investigation		
DEL ROSA CHANNEL	$ 50,000	$150,000
BUREAU OF RECLAMATION		
1. DAY CREEK WATER CONSERVATION	$1,000,000	$1,000,000

PASSED AND ADOPTED by the Board of Supervisors of the County of San Bernardino, State of California, by the following votes:

AYES: Joyner, McElwain, Riordan, Hammock
NOES: None
ABSENT: Skropos

* * * * * *

STATE OF CALIFORNIA
COUNTY OF SAN BERNARDINO } ss.

I, MARTHA M. SEKERAK, Clerk of the Board of Supervisors of the County of San Bernardino, State of California, hereby certify the foregoing to be a full, true and correct copy of the record of the action taken by said Board of Supervisors, by vote of the members present, as the same appears in the Official Minutes of said Board at its meeting of March 3, 1986.

MARTHA M. SEKERAK
Clerk of the Board of Supervisors

By Julie Worley
Deputy

MINUTES OF THE BOARD OF SUPERVISORS

OF SAN BERNARDINO COUNTY, CALIFORNIA

On motion of Supervisor McElwain, duly seconded by Supervisor Riordan, and carried, the following resolution is adopted by the Board of Supervisors of the County of San Bernardino, State of California.

RESOLUTION NO. 86-85

WHEREAS, the Boards of Supervisors of Orange, Riverside, and San Bernardino Counties have for several years expressed unified support for the "All River" alternative for the Santa Ana River Main Stem Project in accordance with the recommendations of the Chief of Engineers of the United States Army Corps of Engineers; and

WHEREAS, the Boards of Supervisors of all three counties have previously adopted resolutions endorsing specific language for congressional bills authorizing construction of the Santa Ana River Main Stem Project; and

WHEREAS, the United States Army Corps of Engineers, Los Angeles District, published a final report dated December 15, 1985, Supplement to Phase 1 General Design Memorandum on the Santa Ana River Main Stem including Santiago Creek entitled Upper Santa Ana River Flood Storage Alternative Study; and

WHEREAS, the Board of Supervisors of San Bernardino County, by Resolution No. 85-577, supported the recommendations of the District Engineer of the Los Angeles District for implementation of Alternative 2, Upper Santa Ana River Dam, appurtenances, and related recreation improvements as in alternative to the Mentone Dam; and

WHEREAS, the Board of Supervisors of Orange and Riverside Counties have indicated their support for Alternative 2, Upper Santa Ana River Dam as an alternative to the Mentone Dam;

NOW, THEREFORE, BE IT RESOLVED that this Board of Supervisors of the County of San Bernardino, also acting as the governing board of the San Bernardino County Flood Control District, in regular session hereby endorses and supports the recommended budget of the President of the United States, and requests the Congress to appropriate in FY 1986/87 the amount of $3.5 million dollars ($3,500,000) and further requests Congress to direct the Corps of Engineers to continue detailed design activities in FY 1987 on all elements of the Santa Ana River flood control project leading to completion of the Phase II General Design Memorandum.

BE IT FURTHER RESOLVED that this Board requests Congress to direct the Corps of Engineers to begin detailed design activities on Alternative 2, Upper Santa Ana River Dam following approval of this element by the Corps of Engineers Board of Rivers and Harbors.

BE IT FURTHER RESOLVED that this resolution be transmitted to the Honorable Robert A. Roe, Chairman of the House Subcommittee on Water Resources, the Honorable James Abdnor, Chairman of the Senate Subcommittee on Water Resources, to San Bernardino County's representatives in Congress, the Honorable Jerry Lewis, the Honorable George E. Brown, Jr., the Honorable Senator Alan Cranston, and the Honorable Senator Pete Wilson.

PASSED AND ADOPTED by the Board of Supervisors of the County of San Bernardino, State of California by the following votes:

AYES: Joyner, McElwain, Riordan, Hammock
NOES: None
ABSENT: Skropos

* * * * * *

STATE OF CALIFORNIA
COUNTY OF SAN BERNARDINO } ss.

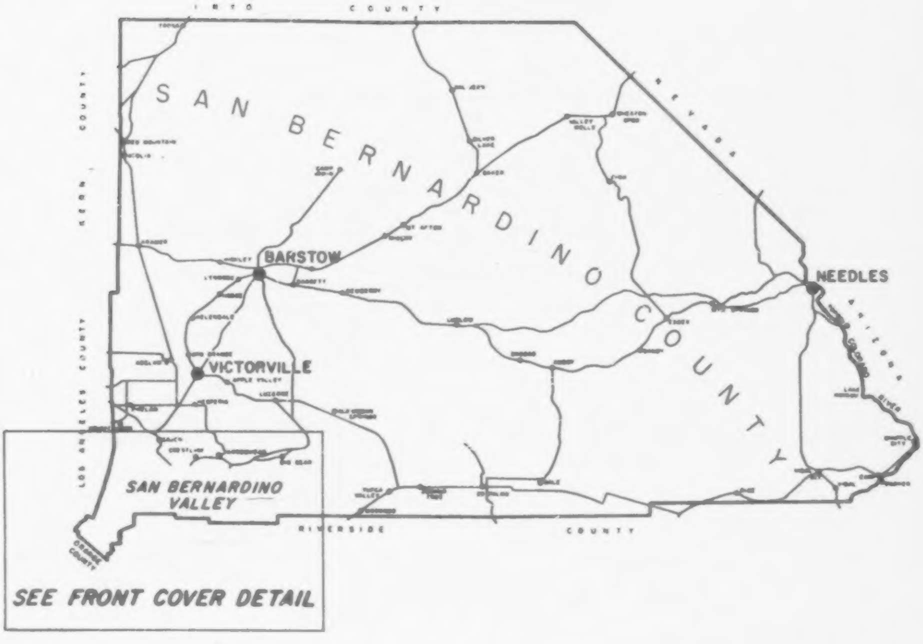
I, MARTHA M. SEKERAK, Clerk of the Board of Supervisors of the County of San Bernardino, State of California, hereby certify the foregoing to be a full, true and correct copy of the record of the action taken by said Board of Supervisors, by vote of the members present, as the same appears in the Official Minutes of said Board at its meeting of March 3, 1986.

MARTHA M. SEKERAK
Clerk of the Board of Supervisors

By Julie Worley
Deputy

APPENDIX II

PORTLAND
PORTLAND
SALT LAKE
SACRAMENTO
OAKLAND
STOCKTON
SAN FRANCISCO
FRESNO
BAKERSFIELD
SANTA BARBARA
LOS ANGELES
SALT LAKE
LAS VEGAS
SAN BERNARDINO COUNTY
ALBUQUERQUE
PHOENIX
TUCSON
SAN DIEGO
LOS ANGELES COUNTY
ORANGE COUNTY


INYO COUNTY
KERN COUNTY
NEVADA
SAN BERNARDINO COUNTY
BARSTOW
VICTORVILLE
APPLE VALLEY
NEEDLES
ARIZONA
COLORADO RIVER
LOS ANGELES COUNTY
ORANGE COUNTY
RIVERSIDE COUNTY
SAN BERNARDINO VALLEY
SEE FRONT COVER DETAIL

SACRAMENTO VALLEY
WESTSIDE CANAL ASSOCIATION
ROUTE 1, BOX 1079M
WOODLAND, CALIFORNIA 95695

April 11, 1986

STATEMENT IN SUPPORT OF FISCAL YEAR 1986-87 APPROPRIATIONS

The Sacramento Valley Westside Canal Association supports and respectfully requests Fiscal Year 1986-87 appropriations for financing the U.S. Bureau of Reclamation's program item, Sacramento River Division, in the amount of $1,060,000.

Respectfully submitted,

Twyla Thompson

Twyla Thompson
President

SACRAMENTO VALLEY
WESTSIDE CANAL ASSOCIATION
ROUTE 1, BOX 1079M
WOODLAND, CALIFORNIA 95695

April 11, 1986

Honorable Tom Bevill, Chairman
U.S. House of Representatives
Committee on Appropriations
Subcommittee on Energy and Water
Development
Rayburn House Office Building, Room 2362
Washington, D.C. 20510

Dear Chairman Bevill:

The Sacramento Valley Westside Canal Association (Association) hereby affirms its support for completion of the Tehama-Colusa Canal and the delivery of water from the Central Valley Project to all districts within the authorized service area. Using this opportunity, the Association reaffirms its support for performing the modifications proposed for the diversion facilities for the Tehama-Colusa Canal Project and the modifications and monitoring to resolve fishery related problems. Specifically, the Association supports and respectfully requests appropriation for Fiscal Year 1986-87, as presented on the Association's statement.

Additionally, the Association hereby expresses support for completion of the Tehama-Colusa Canal Project with the construction of a "large" Oat Reservoir at the terminus of the Tehama-Colusa Canal and the delivery of water to the Yolo-Zamora Water District. In this regard, please be advised that the Association unanimously reaffirmed its Resolution 84-1 (copy enclosed).

Your recognition and consideration of the Association's request is appreciated.

Respectfully yours,

Twyla Thompson

Twyla Thompson
President

Enclosure

SACRAMENTO VALLEY WESTSIDE
CANAL ASSOCIATION
RESOLUTION NO. 84-1

WHEREAS, there is a need to construct an adequate regulating and storage reservoir at the terminus of the Tehama-Colusa canal; and the most desirable location for said reservoir is at what is known as Oat Creek where it intersects the eventual terminus of the Tehama-Colusa canal; and

WHEREAS, it is desirable that said reservoir be of sufficient size not only for water storage but as a regulating reservoir for the Tehama-Colusa canal system; and

WHEREAS, it would be wasteful to expend funds for a smaller reservoir at this time only to have to enlarge the reservoir at a later date as water for such an enlarged service area becomes available; and

WHEREAS, an Oat Creek Reservoir of adequate size (approximately 14,000 acre-feet capacity) has been included in the Presidents's proposed budget for fiscal 1984/85 at a partial cost of approximately $8,200,000.00;

NOW THEREFORE, BE IT RESOLVED:

(1) That the Sacramento Valley Westside Canal Association supports passage of the aforesaid appropriation for fiscal 1984/85 of 8.2 million dollars for the large Oat Creek Reservoir upon the following terms and conditions:

(a) That the water supply that will become available for the Tehama-Colusa canal service area out of the Coordinated Operating Agreement between the State of California and the U.S. Government be allocated first to the service area of the Tehama-Colusa canal as it now exists; and

(b) That the legislative report in support of the aforesaid appropriation specifically provide that the appropriation shall not be construed to constitute an "authorization by appropriation;" that any extension of said service area be done only by specific legislative authorization; and

(c) That the water requirements of the Yolo-Zamora Water District receive the highest priority as it has no supplemental water supply at the present time; originally applied for a water service contract as early as 1958 and is the only water district in the entire service area lying south of and at a lower level from the proposed Oat Creek Reservoir and Tehama-Colusa canal (a gravity canal) and is, therefore, essential for the complete functioning of the reservoir as both a regulating and water storage feature of the Tehama-Colusa canal; and

(d) That present and future needs for supplemental water in the existing service area of the Tehama-Colusa canal, and for any lands which may hereafter be annexed thereto, fully anticipate and take into account the impact of the following factors:

1. Changing crop patterns in the future which may require increased allocations of supplemental water.

2. All adverse effects such as boron or other contamination in the underground water supply.

3. The fact that an inadequate supply of supplemental water leads ultimately to overdrafting of the underground water supply thus causing subsidence in underground aquifers which is irreversible.

Passed and adopted unaimously by the members in attendance at the Sacramento Valley Westside Canal Association meeting on this 17th day of March 1984.

Twyla J. Thompson
Twyla J. Thompson, President

ATTEST:

James F. Eagan
James F. Eagan, Secretary

WESTLANDS WATER DISTRICT
3130 NORTH FRESNO STREET / P.O. BOX 6056, FRESNO, CALIFORNIA 93703
TELEPHONE: (209) 224-1523

BOARD OF DIRECTORS
JACK STONE
PRESIDENT
CRAIG T. ULRICI
VICE-PRESIDENT
RONALD S. ALLEN
PRICE GIFFEN
TIMOTHY J. INDART
DON A. PATTERSON
NED A. SMITH
LAWRENCE C. TURNQUIST
JACK WOOLF

JERALD R. BUTCHERT
MANAGER
VERNA PERRY
SECRETARY
PETE FARMER
TREASURER

April 11, 1986

Honorable Tom Bevill
Chairman, Subcommittee on Energy
and Water Development
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The Administration's proposed Fiscal Year 1987 program for the United States Bureau of Reclamation includes $12,172,000 for the San Luis Unit of the Central Valley Project, California.

I respectfully urge approval of that request.

Appropriation of that amount will assure continuation of work on the San Luis drainage studies, which have been underway for many years. The studies are vital elements in a coordinated program involving the United States, the State of California Resources Agency and local interests. All have joined forces in an ongoing effort to resolve the critical agricultural drainage problems of our area.

We appreciate your leadership in the matter of selenium contamination in the San Joaquin Valley and elsewhere. Your Committee addressed that problem in the Conference Committee Report of Public Law No. 99-141 by conferring authority on the Secretary to make $3.7 million in selenium research loans. While there has been delay in implementation under that authorization, we feel that your assistance will result in early activation of that important research program.

In closing, may I express appreciation for your dedicated service to the wise management of our nation's water resources.

Sincerely,

Jerald R. Butchert
Manager

STATEMENT SUPPORTING
ORANGE COUNTY, CALIFORNIA PROJECTS
BEFORE THE
U. S. HOUSE OF REPRESENTATIVES, COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN

April 16, 1986

I am Carl Nelson, Director of Public Works for the County of Orange, where more than 2 million residents live along the coastal plain of the Santa Ana River.

It is well recognized that the Santa Ana River poses the greatest flood hazard of any project in the western United States. The Corps of Engineers has been studying the problem for many years under Congressional authorization of 1964. The Phase I General Design Memorandum was completed in 1980, and now refinement of the Upper Santa Ana River element is being reviewed by the Board of Engineers for Rivers and Harbors. The Chief of Engineers has reported the project's construction would have a favorable benefit cost ratio. The project is acceptable to all three sponsoring local agencies, i.e., Riverside, San Bernardino and Orange Counties.

The Santa Ana River Project is included in both the House and Senate Water Resource Omnibus Bills. The Orange County Board of Supervisors has endorsed the local cost sharing proposals.

The President's budget for Fiscal Year 1987 includes $3,500,000 for continued study of the Santa Ana River Project. This is sufficient to keep the project on schedule for completion of the Phase II General Design Memorandum by mid-1988, provided the appropriations language specifically permits continued engineering for the Upper Santa Ana River Dam as an integral unit of the overall project.

Previous Congressional support of the Santa Ana River Main Stem Project is very much appreciated. The County of Orange strongly supports the recommended budget of the President of the United States for FY 1986-87 as shown by attached resolution of the Orange County Board of Supervisors adopted April 8, 1986 and requesting appropriations of $3,500,000 for the Santa Ana River Main Stem Project and $550,000 for Interim Report III (West Orange County Flood Channels).

Thank you for the opportunity to appear in support of the Santa Ana River Main Stem Project.

CRN:ac(M1)56

RESOLUTION OF THE BOARD OF SUPERVISORS OF
ORANGE COUNTY, CALIFORNIA
April 8, 1986

On motion of Supervisor Clark, duly seconded and carried, the following Resolution was adopted:

WHEREAS, the Boards of Supervisors of Orange, Riverside, and San Bernardino Counties have for several years expressed unified support for the "All River" alternative for the Santa Ana River Main Stem Project in accordance with the recommendations of the Chief of Engineers of the United States Army Corps of Engineers; and

WHEREAS, the Boards of Supervisors of all three counties have previously adopted resolutions endorsing specific language for congressional bills authorizing construction of the Santa Ana River Main Stem Project; and

WHEREAS, the United States Army Corps of Engineers, Los Angeles District, published a final report dated December 15, 1985, Supplement to Phase I General Design Memorandum on the Santa Ana River Main Stem including Santiago Creek entitled Upper Santa Ana River Flood Storage Alternative Study; and

WHEREAS, the Board of Supervisors of Orange County, by Resolution dated December 10, 1985 supported the recommendations of the District Engineer of the Los Angeles District for implementation of Alternative 2, Upper Santa Ana River Dam, appurtenances, and related recreation improvements as an alternative to the Mentone Dam; and

WHEREAS, the U. S. Senate and the House of Representatives have passed separate bills (S.1567 and H.R.6) both of which include

OFFICE OF
COUNTY COUNSEL
ORANGE COUNTY

F0192-210 (5/77)

BPD:bs

authorization of the Santa Ana River "All River Plan"; and which are referred to Conference Committee for reconciliation before submittal to the President.

NOW, THEREFORE, BE IT RESOLVED that this Board of Supervisors of the County of Orange, also acting as the governing board of the Orange County Flood Control District, in regular session hereby endorses and supports the recommended budget of the President of the United States, and requests the Congress to appropriate in FY 1986-87 the amount of $3.5 million dollars ($3,500,000) for continued detailed design activities in FY 1987 on all elements of the Santa Ana River flood control project leading to completion of the Phase II General Design Memorandum, and further requests the Congress to appropriate $550,000 for continued engineering study for Interim Report III, West Orange County portions of the Santa Ana River Basin Project.

BE IT FURTHER RESOLVED that this Board does also hereby urge the House and Senate conferees to promptly reconcile H.R. 6 and S. 1567, and adopt a federal Water Resources Omnibus Bill suitable for execution by the President in order to provide badly needed flood protection for residents of the Santa Ana River Flood Plain at the earliest possible time.

BE IT FURTHER RESOLVED that this resolution be transmitted to the Honorable Thomas Bevill, Chairman of the House Appropriations Subcommittee on Water Resources, the Honorable Mark Hatfield, Chairman of the Senate Appropriations Subcommittee on Water Resources, to Orange County's delegation in the House of Representatives, and to Senators Alan Cranston and Pete Wilson.

/

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OFFICE OF
COUNTY COUNSEL
ORANGE COUNTY

F0192-210 (8/77)

AYES: SUPERVISORS RALPH B. CLARK, HARRIETT M. WIEDER, ROGER R. STANTON, BRUCE NESTANDE, AND THOMAS F. RILEY

NOES: SUPERVISORS NONE

ABSENT: SUPERVISORS NONE

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, LINDA D. ROBERTS, Clerk of the Board of Supervisors of Orange County, California, hereby certify that the above and foregoing Resolution was duly and regularly adopted by the said Board at a regular meeting thereof held on the 8th day of April, 19 86, and passed by a unanimous vote of said Board.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 8th day of April, 19 86.

Linda D. Roberts
LINDA D. ROBERTS
Clerk of the Board of Supervisors
of Orange County, California

59-872 1833

OFFICE OF COUNTY COUNSEL ORANGE COUNTY

F0192-208.1

WEDNESDAY, APRIL 16, 1986.

CALIFORNIA PROJECTS—CALIFORNIA MARINE AFFAIRS AND NAVIGATION CONFERENCE

WITNESSES

ROBERT H. LANGNER, PRESIDENT

EDWARD GORMAN, CHAIRMAN OF THE BOARD, CHIEF HARBOR ENGINEER, PORT OF LOS ANGELES

RAY FLETCHER, COMMISSIONER, PORT HUENEME, OXNARD HARBOR DISTRICT

BOB JENNINGS, COMMISSIONER, PORT HUENEME, OXNARD HARBOR DISTRICT

TED MARIONCELLI, HARBOR DIRECTOR, OCEANSIDE SMALL CRAFT HARBOR DISTRICT

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JIM BLECHA, COMMISSIONER, PORT SAN LUIS HARBOR DISTRICT

TOM POWERS, SUPERVISOR, CONTRA COSTA COUNTY

SHEILA LODGE, MAYOR, CITY OF SANTA BARBARA

DAVE BERNARDI, DIRECTOR OF PUBLIC WORKS, CITY OF SAN RAFAEL

Mr. BEVILL. Next is our good friend, Bob Langner.

We are delighted to hear from you. You may come forward and present any prepared statements for the record, and proceed as you wish.

Mr. LANGNER. Thank you, Mr. Chairman, Members. It is good to be back. It is like old home week to be here. This is our 28th year before you.

We certainly join in the commendations and appreciation to Mr. Fazio for all the work he has done.

We have a number of people here. I appreciate your including in the record their statements. Consistent with your request for brevity, I think we can make a quick job of it.

For the record, it is our schedule of recommendations. We do support the President's budget fully. In fact, two-thirds of our recommendations are fully consistent with the President's budget, and one-third we ask in some instances of possible increases consistent with the needs of the budget austerity which you face.

We also note the action by the Senate and hope for an early approval by the Congress to break the log jam of more than a decade of minimal authorizations for new projects. We note this with enthusiasm.

In my statement to this body in 1959, my first statement, and every year since, I have talked about the dynamics of California and the West in general, and our State in particular. Western migration and population growth continues. I will not elaborate upon the statistics.

Suffice it to say, in 1985 total revenue volume of cargo through California ports increased over 16-½ percent despite some recessions in offshore trades. Our commercial and navigation infrastructure requires and receives tremendous investments by the ports themselves. We are concerned also with the possibility of revenue bonds, tax treatment which might very much affect that.

Aberrant weather patterns have had an effect on all water projects. California has had more than its share of these in the past winter. For this reason, we request money for additional funding for the California Coast Storm and Tidal Wave Study. This is one you had extra funding for in the past.

It is not of particular specific benefit to California. As you know, it is a methodology study which will benefit the entire nation through studying the stresses and dynamics of coastal erosion.

I think it is also important, particularly in this last several days, to note the emphasis on security and logistical base. You talk about the responsibilities of the Coast Guard, the positioning of fleet deployment. All these things affect the navigational needs.

California is doing its share, and more, in this regard. Our channels and navigational aids and all must be maintained and deepened and widened.

We also emphasize that the traditional Federal roles must have some continuity. Any sudden changes in over 200 years of prime Federal responsibility for the nation's waterways, navigation systems, requires evolution. We think perhaps we are going in that direction now.

We must emphasize any sudden changes in the financial bases will adversely affect our port structure. They have to be moderated by the Congress. We know you are fully aware of this and are meeting your responsibility in that regard.

The kinds of investment you and your predecessors shared over the years, and the projects we are here supporting, have been almost without exception exceeding expectations in cost benefits.

We ask only this record and achievement be considered fully in the context of the austerity demands placed upon you. For some of our witnesses, I am pleased to present the Chairman of the Board of CMANC, Ed Gorman.

[The statement of Mr. Langner follows:]

AP 1 [illegible]

CALIFORNIA
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Marine Affairs and Navigation Conference
ORGANIZED 1956
303 WORLD TRADE CENTER • SAN FRANCISCO, CALIFORNIA 94111 • TELEPHONE (415) 982-7788

April 16, 1986

PRESENTED TO: Subcommittee on Energy and Water Development
Committee on Appropriations
2nd Session, Ninety-Ninth Congress

STATEMENT OF: Robert H. Langner, President
California Marine Affairs and Navigation Conference

Mr. Chairman and Members:

It is again a pleasure — and I consider myself fortunate — to be able to appear before you for the 28th consecutive year on behalf of the funding of California navigation, beach erosion and related public works projects. With me today is the Chairman of the California Marine Affairs and Navigation Conference, Officers and Directors of the organization as well as other project sponsors and supporters, to present oral and written testimony or to be introduced.

Consistent with your request for brevity, C-MANC's presentation will seek to minimize hearing time as it has in the past. To this end, we ask that written statements submitted be included as part of the record of these proceedings. Spoken testimony will be at most limited to a brief summary of such statements — with the knowledge that this will not lessen the weight and consideration you give the written support and endorsements submitted.

Also as part of my statement, and for the record, is C-MANC's schedule of recommendations for FY 87 project funding, carefully considered and approved by our membership. In taking such action, we are fully aware and appreciative of the need for restraint in the appropriations process, to reverse the soaring Federal budgetary deficit. To this end, each project endorsed was scrutinized more closely than ever and our reduced funding recommendations this year reflect the realities you face.

First, C-MANC supports fully the President's budget proposals, 2/3rds of which are endorsed without requests for funding in excess of the Administration's requests. Of the remaining 1/3rd, the merits of the additional funding sought will be expanded upon by C-MANC representatives here today, and in statements subsequently submitted.

Action by the Senate and hoped-for early approval by the Congress of legislation to break the log jam of more than a decade of minimal authorizations for new projects is noted with enthusiasm by C-MANC. While details remain to be resolved — including some of significance — we join in the relief that this long stasis will soon be relieved on the basis of hard-to-achieve compromises nearing agreement.

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City of Redondo Beach
LES SULLIVAN
Les Sullivan & Associates

In my first statement to this body in 1959, and in every year since, the dynamics of the Pacific Coast and Basin have been reported and described. Our role in the nation's world commerce and national security seems everexpanding Navigation continues as a principal and vital element of such capabilities. Further, westerly migration and indigenous growth continues our population climb. Water-related recreation remains the single-most-popular form, maintaining pressure for expanding boating and shallow-draft facilities.

Aberrant weather patterns have major effect on all water projects, including those husbanded by C-MANC. Among the latter are shoreline and beach erosion, the most significant of which is the Coast of California, Storm and Tidal Wave Study, for which we request consideration of $500,000 in additional funding for the coming fiscal year. C-MANC's testimony to you on this special study in past years -- as to its need and significance, not only to California but in the national context -- are not now repeated. Suffice to say that it is an investment -- a long-term commitment -- which should increasingly pay off in new knowledge and understanding of the dynamic processes involved and the most effective way to study, measure and evaluate them.

1985's total volume of revenue cargo through California ports increased 6.5% over the previous year. Our commercial navigation infrastructure requires -- and receives -- major, continuous improvements and investments by those responsible for its operation, as do shallow draft facilities serving the fisheries and recreational boaters. Both are faced with possible funding restraints should sale of revenue bonds be adversely affected by significant Federal tax changes. Further, the costs and delays involved in environmental regulations and standards -- otherwise supported by project sponsors to the extent that they are effective and can be met -- largely originate with Federal demands and requirements. These additional costs all too often escalate by unnecessary processing and review delays, placing additional burdens on the maintenance and improvement of projects.

Finally, added and new emphasis on security, preparedness and response capabilities require that the port system be increasingly involved in such national strategic considerations.

It is our conclusion -- a position repeated over the almost three decades of C-MANC representation here -- that the traditional Federal roles must have continuity. The United States Government should not and cannot undertake sudden major shifts in its 200 years of prime responsibility for the nation's navigational system. We recognize that there is need for evolutionary modification of this role, but negative, counterproductive and even destructive impacts which could occur must be minimized. In the current instance, authorizing legislation now pending would appear to generally meet such positive criteria. But adequate funding must not be neglected, despite exigencies of budgetary deficits.

The investment that you and your predecessors have assured over the years in the kinds of projects we are supporting here today have almost without exception exceeded expectations in their productivity and return to the nation. We ask only that this record and achievement be considered fully in the context of the austerity demands placed on you and the Congress generally.

Thank you for this opportunity to appear once again before you, to present our recommendations and requests for your consideration, to report briefly on our needs and developments, and to comment on Federal policies and programs.

# # #

Attached: Funding Recommendations

C-MANC
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C-MANC supports fully the President's Budget, and further, recommends additional funding of a limited number of projects.

(Amounts in Thousands)

			FY 1986		FY 87 C-MANC Recommendations		
Project	Total Cost C of E	Balance After FY 1985	Conference Allowance	Work Allowance	President's Budget	Additional Total Recommendations (When Greater than Budget)	Purpose of Funding
POTENTIAL NEW NAVIGATION STUDIES							
Humboldt Harbor & Bay (Deepening)	330	330	0	0	0	330	Complete Recon Study
Santa Barbara Harbor (Restudy)	220	220	0	0	0	220	Complete Recon Study
Santa Cruz Harbor	145	145	0	0	0	145	Complete Recon Study
West Newport Beach Harbor	260	260	0	0	0	260	Complete Recon Study
NAVIGATION STUDIES IN PROGRESS							
Coast of Northern California (Harbors for Light Draft Vessels) (Moss Landing)	613	0	0	0	0	0	Funded for completion
Los Angeles-Long Beach Harbors	7,800	1,129	0	0	0	500	Continue Feasibility Study
Morro Bay Harbor	434	280	0	0	0	280	Complete Recon Study
North Coast of Los Angeles County	825	660	0	0	0	250	Continue Feasibility Study
Oceanside Harbor	790	110	0	0	0	110	Complete Feasibility Study
Redondo Beach Harbor (King Harbor)	730	386	200	0	0	200	Continue Feasibility Study
San Francisco Bay Area (In-Depth)	3,220	429	132	132	0	0	
Int #4 (Collection & Disposal of Debris)	(465)	(132)	(132)	(132)	(0)	(0)	Will be Completed FY 86
Int #5 (Redwood City Harbor)	(471)	(297)	(0)	(0)	(0)	(0)	Await Development of Additional Commerce
San Francisco Bay Shoreline	4,280	2,155	520	520	840	n/c	Continue Feasibility Studies
Int #1 (S. Alameda & Santa Clara)	(1,800)	(470)	(295)	(350)	(120)	n/c	Complete Interim Feasibility Study
Int #2 (San Mateo & N. Alameda)	(1,360)	(775)	(225)	(170)	(440)	n/c	Continue Interim Feasibility Study
Int #3 (North Bay)	(1,005)	(870)	(0)	(0)	(280)	n/c	Continue Interim Feasibility Study
Int #4 (Final)	(115)	(75)	(0)	(0)	(0)	(0)	
San Leandro Bay	890	840	0	0	0	375	Complete Recon Study
Sunset Harbor	1,830	1,134	250	250	0	884	Complete Feasibility Study
Ventura Marina (Review)	635	385	100	100	175	285	Complete Feasibility Study

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(Amounts in Thousands)

Project	Total Cost C of E	Balance After FY 1985	FY 1986 Conference Allowance	FY 1986 Work Allowance	FY 87 C-MANC Recommendations President's Budget	FY 87 C-MANC Recommendations Additional Total Recommendations (When Greater than Budget)	Purpose of Funding
SHORELINE PROTECTION STUDIES IN PROGRESS							
Point Mugu to San Pedro Breakwater	424	300	0	0	0	300	Complete Recon Study
SPECIAL STUDIES							
Coast of California, Storm & Tidal Waves	7,740	4,820	1,350	1,335	1,000	1,500	Continue Study of entire Coast of California
CONTINUATION OF PLANNING AND ENGINEERING STUDIES							
Oakland Inner Harbor	18,300 (820)	(795)	(380)	(380)	(415)	n/c	Complete Design, combine with Oakland Outer Harbor
ADVANCE ENGINEERING AND DESIGN							
Noyo River and Harbor (Breakwater)	6,900 (1,560)	(787)	(0)	(0)	(0)	(500)	Continue Design
Noyo River and Harbor (Channel Extension)	2,100 (580)	(130)	(0)	(0)	(0)	(130)	Complete Design

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(Amounts in Thousands)

Project		Total Cost C of E	Balance After FY 1985	FY 1986		FY 87 C-MANC Recommendations		Purpose of Funding
				Conference Allowance	Work Allowance	President's Budget	Additional Total Recommendations (When Greater than Budget)	
NEW CONSTRUCTION PROJECTS								
Oakland Outer and Inner Harbors	(N)	33,200	33,165	155	230	2,500	3,000	Initiate Construction of Combined Project
CONTINUING CONSTRUCTION PROJECTS								
Fisherman's Wharf Area	(N)	8,900	5,550	5,000	5,000	550	n/c	Complete Construction
Port Hueneme	(N)	2,501	1,020	0	0	1,020	n/c	Initiate and Complete Channel Widening
Port San Luis	(N)	11,400	10,680	0	0	0	500	Complete Design
Richmond Harbor	(N)	19,300	19,285	525	935	8,000	n/c	Continue Construction
Sacramento River Deep Water Ship Channel	(N)	52,700	52,646	0	1,180	3,600	n/c	Continue Construction
San Francisco Bay to Stockton (John F. Baldwin & Stockton Ship Channels)	(N)	138,000	103,057	21,000	13,600	3,900	5,000	Complete Stockton Channel Deepening, initiate wavewash protection, and continue design for Phase 3.
Santa Cruz Harbor	(N)	4,202	2,230	2,230	2,230	0	0	Funded for Completion
Imperial Beach	(BE)	3,340	0	0	0	0	0	No requirement pending resolution of litigation
Surfside-Sunset & Newport Beach	(BE)	29,400	19,678	0	0	0	0	No current requirement for periodic nourishment

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(Amounts in Thousands)

Project	FY 85 Obligations	FY 1986 Estimated Obligations	FY 1987 FY 87 C-MANC Recommendations President's Budget	FY 1987 FY 87 C-MANC Recommendations Additional Total Recommendations (When Greater than Budget)	Purpose of Funding
OPERATIONS AND MAINTENANCE PROJECTS					
Bodega Bay Harbor	198	27	0	100	Maintenance of Spud Point
Channel Islands Harbor	3,522	497	0	3,000	Periodic Dredging
Crescent City Harbor	1,103	4,379	455	n/c	Monitor Breakwater Repairs
Dana Point Harbor	17	0	355	n/c	Periodic Dredging
Halfmoon Bay Harbor	262	19	0	0	No maintenance required
Humboldt Harbor and Bay	6,076	4,451	2,318	n/c	Dredging & Breakwater Repairs
Los Angeles - Long Beach Harbors	969	862	1,457	n/c	Dredging mouth of Los Angeles River
Los Angeles - Long Beach Harbors Model	130	135	140	1,300	Upgrade model to modern standards
Marina Del Rey	0	20	1,175	n/c	Periodic Dredging
Morro Bay Harbor	2,956	134	0	0	No maintenance required
Moss Landing Harbor	178	27	740	n/c	Periodic Dredging
Napa River	0	0	0	0	No maintenance required
Newport Bay Harbor	11	0	0	0	No maintenance required
Noyo River and Harbor	451	559	380	n/c	Dredging
Oakland Harbor	1,335	1,250	1,624	n/c	Dredging and Bridge Repairs
Oceanside Harbor	0	980	480	n/c	Dredging
Oceanside Experimental Sand By-Pass System	1,153	5,601	1,918	n/c	Operation of Bypassing Plant
Petaluma River	56	0	3,225	n/c	Dredge across flats
Port Hueneme	10	16	0	0	No maintenance required
Port San Luis	190	78	0	0	No maintenance required
Redondo Beach Harbor (King Harbor)	16	131	0	0	No maintenance required
Redwood City Harbor	0	0	0	400	Dredge 5 foot Recreation Channel
Richmond Harbor	622	1,276	1,745	n/c	Dredging
Sacramento River					
Sacramento River (30 ft.)	1,794	179	545	n/c	Dredging and stone protection
Sacramento River (Shallow Draft)	35	93	63	n/c	Maintain lock

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(Amounts in Thousands)

Project	FY 85 Obligations	FY 1986 Estimated Obligations	FY 1987: FY 87 C-MANC Recommendations: President's Budget	FY 1987: FY 87 C-MANC Recommendations: Additional Total Recommendations (When Greater than Budget	Purpose of Funding
OPERATIONS AND MAINTENANCE PROJECTS					
San Francisco Bay-Delta Model Structure	1,176	1,204	1,029	n/c	Annual maintenance and operation of Visitors Center
San Francisco Harbor	2,064	1,682	1,370	n/c	Dredging
San Joaquin River	625	403	2,013	n/c	Dredging
San Leandro Marina	125	0	0	0	No maintenance required.
San Pablo Bay and Mare Island Strait	1,738	3,851	4,640	n/c	Dredging
San Rafael Creek	0	450	0	2,000	Periodic dredging
Santa Barbara Harbor	324	784	800	n/c	Dredging
Santa Cruz Harbor	867	1,555	0	800	Dredging
Suisun Bay Channel	207	0	760	n/c	Dredging
Suisun Channel	0	0	0	0	No maintenance required
Ventura Harbor	1,628	1,765	1,690	n/c	Dredging
Drift Removal (S.F. Harbor and Bay)	1,040	1,404	1,380	n/c	Annual maintenance
		#	#	#	

Mr. **Gorman**. Mr. Chairman, members of this honorable committee, it is an honor and a privilege to be here today. For all members of the California Marine Affairs and Navigation Conference, I want to thank you for scheduling this time today. I know you are very busy. As Bob said, I will keep it very brief.

I represent the Port of Los Angeles in addition to being the Chairman of CMANC, and we had our esteemed Congressman Anderson ably represent us. We will also be submitting written testimony for both ports. We will be asking for some additional funding over and above the President's budget, as indicated by Mr. Anderson. We will beg your favorable consideration.

Mr. **Langner**. Port Hueneme is represented by Commissioner Ray Fletcher this morning.

Mr. **Fletcher**. Mr. Chairman, members of the committee, I am a Commissioner of Oxnard Harbor District, Port of Hueneme. Port Hueneme is the only deep draft seaport between Los Angeles and San Francisco.

I appear before you today in support of the $1,020,000 identified in the President's fiscal year 1987 budget for the construction project at the Port of Hueneme. These funds will initiate and complete construction of phase III of the project authorized by the Rivers and Harbors Act of 1968, Section 101. Your committee staff has the necessary documentation to support this testimony.

I have with me today Commissioner Jennings, as well, to support the testimony.

Thank you very much.

[The statement of Mr. Fletcher follows:]

TESTIMONY

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE.

I AM COMMISSIONER RAY FLETCHER OF THE OXNARD HARBOR DISTRICT, PORT OF HUENEME. THE PORT OF HUENEME IS THE ONLY DEEP DRAFT SEA PORT BETWEEN LOS ANGELES AND SAN FRANCISCO.

I APPEAR BEFORE YOU TODAY IN SUPPORT OF THE $1,020,000 IDENTIFIED IN THE PRESIDENT'S FY 87 BUDGET FOR THE CONSTRUCTION PROJECT AT THE PORT OF HUENEME. THESE FUNDS WILL INITIATE AND COMPLETE CONSTRUCTION OF PHASE III OF THE PROJECT AUTHORIZED BY THE RIVERS AND HARBORS ACT OF 1968, SECTION 101.

~~THANK YOU.~~

benefit-to-cost ratio is estimated to be 1.1 to 1.0. The Supplemental Report concluded: "The plan recommended in this supplemental design memorandum is considered to be the most economic and effective scheme for handling present and future harbor operations."

Attached as Exhibit 2 are pertinent sections from the Supplemental Design Report for the Committee's consideration.

OXNARD HARBOR DISTRICT
PORT OF HUENEME

SUPPLEMENT TO TESTIMONY OFFERED BY OXNARD HARBOR DISTRICT COMMISSIONEP RAY A. FLETCHER BEFORE THE HOUSE SUB-COMMITTEE ON ENERGY AND WATER DEVELOPMENT ON WEDNESDAY, APRIL 16, 1986, AT 11:00 A.M.

RECOMMENDATION: The Oxnard Harbor District Board of Harbor Commissioners recommends that the Congress of the United States approve the appropriation of $1,020,000 as part of the fiscal year 1987 federal budget for the "Continuing Construction Project-Port Hueneme (Phase III)" (Initiate and Complete Construction).

BACKGROUND: Port Hueneme Harbor was authorized by the Rivers and Harbors Act of 1968, Section 101, Public Law 90-483, as shown in House Document 362, 90th Congress, 2nd Session. Design Memorandum No. 1 for Port Hueneme, prepared in February 1974, recommended that construction of the authorized project be performed in three phases. Phases I and II were completed in September 1972 and 1975, respectively. Phase I was constructed by the local sponsor who was then reimbursed in accordance with Section 215 agreement of PL 90-483. Phase III was previously deferred pending demonstration of need.

Last year, the Oxnard Harbor District Commissioners appeared before Congress seeking reactivation of Phase III. Exhibit 1 is Resolution No. 577 of the Oxnard Harbor District urging the allocation of federal funds to complete Phase III of the previously authorized project. During 1985, the Los Angeles District, U.S. Army Corps of Engineers, initiated and completed "Supplement No. 1 to Design Memorandum No. 1", September 1985.

This supplement to the original Design Memorandum, concluded "increased tonnage and traffic through the harbor (Port of Hueneme) have resulted in a large demand for berthing areas and have created congestion in channel A. Present facilities operated by the Oxnard Harbor District are not capable of handling present and projected harbor traffic." The District Engineer "recommends a modification to Phase III of the authorized project" with a total first cost for the general navigational facilities of $1,883,000, comprising a cost of $1,140,000 to the United States and $743,000 to the Oxnard Harbor District. The average annual federal cost is estimated to be $79,000 using the authorized interest rate of 3 1/4 percent. The average annual benefit is estimated to be $186,000. The benefit-to-cost ratio is estimated to be 2.4 to 1.0. Using the current interest rate of 8 5/8 percent, the

RESOLUTION NO. 577

RESOLUTION OF THE BOARD OF HARBOR COMMISSIONERS, OXNARD HARBOR DISTRICT URGING THE ALLOCATION OF FEDERAL FUNDS TO COMPLETE PHASE III OF THE CONGRESSIONAL APPROVED NAVIGATION PROJECT AT THE PORT OF HUENEME

WHEREAS, a navigation project for the deep water Port of Hueneme, California was authorized by the Rivers & Harbors Act of 1968, Section 101, Public Law 90-483 as shown in House Document 362, 90th Congress, 2nd Session; and

WHEREAS, the Oxnard Harbor District expended the proceeds of a $4.9 million general obligation bond issue to complete its harbor expansion program in 1972, known as Phase I of the Port of Hueneme Navigation Project; and

WHEREAS, in 1975 the United States Government provided $805,000 to complete Phase II of the Port of Hueneme Navigation Project by deepening the harbor basin and channel A waterway to a depth of -36 mean lower low water; and

WHEREAS, the need has been demonstrated to complete the final phase of the Port of Hueneme navigation project known as Phase III; and

WHEREAS, completion of Phase III of this navigation project will result in locally financed improvements to the port complex totalling approximately $10 million; and

WHEREAS, the federal portion of Phase III of the Port of Hueneme Navigation Project is anticipated to cost $2 million; and

WHEREAS, the continued growth of domestic and international commerce has shown a dramatic increase over the last five years; and

WHEREAS, a recent ocean cargo marketing survey shows a clear need for completion of Phase III of the Port of Hueneme navigation project; and

WHEREAS, the Board of Harbor Commissioners has recognized the overriding need to expand the port and has set in motion a plan to accomplish this important objective.

NOW, THEREFORE, BE IT RESOLVED that this Oxnard Harbor District Board of Harbor Commissioners goes on record of overwhelmingly supporting completion of Phase III of the Port of Hueneme Navigation Project; and

EXHIBIT 1

BE IT FURTHER RESOLVED that this Board of Harbor Commissioners respectfully urges the congress that the federal share of funding be allocated in fiscal year 1986 in order to complete the final phase of this very important navigation project.

ADOPTED, SIGNED and APPROVED this 11th day of March, 1985.

RAY A. FLETCHER, President
Board of Harbor Commissioners
Oxnard Harbor District

ATTEST:

Bob H Jennings
BOB H. JENNINGS, Secretary
Board of Harbor Commissioners
Oxnard Harbor District

SUPPLEMENT TO
DESIGN MEMORANDUM NO.1

General Design
For
Port Hueneme Harbor, California

EXECUTIVE SUMMARY

Port Hueneme Harbor was authorized by the Rivers and Harbors Act of 1968, Section 101, Public Law 90-483, as shown in House Document 362, 90th Congress, 2nd Session.

Design Memorandum No.1 for Port Hueneme, prepared in February 1974, recommended that construction of the authorized project be performed in three phases. Phases I and II were completed in September 1972 and 1975, respectively. Phase I was constructed by the local sponsor who was then reimbursed in accordance with Section 215 agreement of PL 90-483. Phase III was deferred pending demonstration of need.

Increased tonnage and traffic through the harbor have resulted in a large demand for berthing areas and have created congestion in channel A. Present facilities operated by the Oxnard Harbor District (OHD) are not capable of handling present and projected harbor traffic.

The existing project consists of two jetties 800 and 1000 feet long, respectively; an approach channel 800 feet long, 600 feet wide, and 40 feet deep at mean lower low water (MLLW); an entrance channel 1550 feet long, 330 feet wide, and 36 feet deep; a central basin 1,080 feet long, 1025 feet wide, and 35 feet deep; and channel A, which is 2,320 feet long, varying from 160 feet to 275 feet wide, and 35 feet deep.

The District Engineer recommends a modification to Phase III of the authorized project. The Phase III recommended plan consists of widening the east portion of channel A by 115 feet to a depth of 20 feet. This dredging would provide for an addition of one berth to the four existing deep-draft berths maintained and operated by the OHD. The 20 foot depth was chosen as the recommended plan due to a lack of NED benefits below that limit. The remaining work to complete the authorized project will be reclassified to the "Inactive" category. The remaining work includes the undredged 115 feet widening of channel A from -20 to -35 feet MLLW and extension of channel A to 2830 feet in length, 275 feet wide, and 35 feet deep.

The total first cost for the general navigational facilities of the recommended plan is estimated at $1,883,000, comprising a cost of $1,140,000 to the United States and $743,000 to the Oxnard Harbor District.

The annual Federal cost for operation and maintenance for the Phase III area is estimated to be $2,000.

EXHIBIT 2

The average annual Federal cost is estimated to be $79,000 using the authorized interest rate of 3-1/4 percent. The average annual benefit is estimated to be $186,000. The benefit-to-cost ratio is estimated to be 2.4 to 1.0.

Using the current interest rate of 8-5/8 percent the average annual cost is $167,000. The average annual benefit is estimated to be $183,000. The benefit-to-cost ratio is estimated to be 1.1 to 1.0.

Environmental impacts of the recommended plan are insignificant. Construction will temporarily disrupt wildlife in the harbor, but no long term effects are expected. A Supplemental Environmental Assessment (SEA) is being submitted as a supplement to the Environmental Impact Statement (EIS) prepared in February, 1974.

The plan recommended in this supplemental design memorandum is considered to be the most economic and effective scheme for handling present and future harbor operations.

PERTINENT DATA

LOCATION

Latitude 34 09' N
Longitude 119 12' W

Tide	Elevation (ft)
Mean Lower Low Water (MLLW)	0.0
Mean Higher High Water (MHHW)	5.4
Mean High Water (MHW)	4.7
Extreme Low Water	-2.5
Mean Sea Level	2.8

Range of Tides	(ft)
Mean	3.7
Diurnal	5.4
Extreme	10.0

PERTINENT DATA (Cont.)

EXISTING PROJECT DIMENSIONS

Item	Length (ft)	Width (ft)	Depth (ft)
West Jetty	800		+20
East Jetty	1,000		+20
Approach Channel	800	600	40
Entrance Channel	1,550	330	36
Central Basin	1,080	1,025	35
Channel A	2,320	Varies, 160 to 275 ft	35

RECOMMENDED PROJECT DIMENSIONS

Item	Length (ft)	Width (ft)	Depth (ft)
West Jetty	800		+20
East Jetty	1,000		+20
Approach Channel	800	600	40
Entrance Channel	1,550	330	36
Central Basin	1,080	1,025	35
Channel A	2,410	275	35*

*Note: Depths are based on MLLW datum. Phase III portion of channel A is to be dredged to 20 feet depth.

INTRODUCTION

1. Port Hueneme Harbor is a deep-draft commercial and military harbor along the southern California coast, within the city of Port Hueneme, Ventura County, California. It is located about 65 miles northwest of Los Angeles.

2. Design Memorandum No. 1 for Port Hueneme, prepared in February 1974, recommended that construction for Phase III of the authorized project for Port Hueneme Harbor be deferred pending demonstration of need. The study to commence final Phase III construction for Port Hueneme Harbor was initiated as a result of increased demand for berthing areas and facilities in the harbor. Vessel visits by oil supply boats have increased in recent years due to the activity of oil companies in the Santa Barbara Channel. Deep-draft merchant vessel visits have increased from 75 in 1975 to 271 in 1984. In a letter dated May 14, 1980, to the District Engineer, the Oxnard Harbor District (hereafter called OHD) requested initiation of work for Phase III of the authorized project.

AUTHORITY

3. This Supplement to Design Memorandum No.1 is submitted as authorized by Congress, Public Law 90-483, 90th Congress, 2nd Session, approved August 13, 1968, and reads in part as follows:

> "SEC. 101. That the following works of improvement of rivers and other waterways for navigation, flood control, and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and supervision of the Chief of Engineers, in accordance with the plans and subject to the conditions recommended by the Chief of Engineers in the respective reports hereinafter designated. The provisions of Section 1 of the River and Harbor Act approved March 2, 1945 (Public Law Numbered 14, 79th Congress, 1st Session), shall govern with respect to projects authorized in this title; and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or flood control and for irrigation and purposes incidental thereto, shall apply as if herein set forth in full. Port Hueneme Harbor, California: House Document Number 362, 90th Congress, at an estimated Federal cost of $1,000,000."

PROJECT DESCRIPTION

4. PROJECT AS DESCRIBED IN PROJECT DOCUMENT. The authorized project for Port Hueneme Harbor, California, which was recommended for approval in the Chief of Engineers' report dated June 3, 1968, was published as part of House Document 362, 90th Congress, 2nd Session, herein after referred to as the project document. The principal navigational features of the authorized project, as described in the project document, consist of a) an approach channel 600 feet wide, 800 feet long, and 40 feet deep; b) an entrance channel 330 feet wide, 1,550 feet long, and 36 feet deep; c) a central basin 1,025 feet wide, 1,080 feet long, and 35 feet deep; a channel (channel A) 275 feet wide, 2,830 feet long, and 35 feet deep; and e) two rubblemound stone jetties 800 and 1,000 feet long, respectively (see plate 1).

5. EXISTING PROJECT FEATURES. The existing principle navigational features in Port Hueneme Harbor consist of the approach channel, entrance channel, central basin, and the two rubblemound stone jetties at authorized project dimensions. Channel A is 2320 feet long, with a varying widths of 160 to 275 feet, and a depth of 35 feet (see plate 1).

PURPOSE AND SCOPE OF STUDY

6. The purpose of this supplement is to provide the justification for Phase III construction and to present the basis for modifications to the authorized project document plan. The supplement will discuss the present and projected harbor conditions, plan formulation for the recommended Phase III construction, local requirements, and will address environmental concerns.

PROJECT HISTORY SINCE AUTHORIZATION

7. General Design Memorandum No.1 (GDM No. 1) was prepared in February 1974. It recommended that:

a. The existing harbor for deep-draft vessels at Port Hueneme be adopted as a Federal project to provide for maintenance of west and east jetties, approach channel, entrance channel, central basin, and channel A, as well as to provide for improvement of the central basin and channel A by deepening to 35 feet, and lengthening and widening channel A.

b. The work be performed in three incremental phases. The completed work of phases I and II are illustrated on plate 3.

c. The third phase be deferred, pending demonstration of need. This phase would complete the authorized project.

8. Phase I construction was completed by the Oxnard Harbor District in February 1972, who was then reimbursed in accordance by a Section 215 agreement of Public Law 90-483. Construction consisted of dredging channel A to varying widths of 160 to 275 feet; 2320 feet in length, and 35 feet deep. Dredged material amounted to 290,000 cubic yards within Federal project limits and 287,000 cubic yards along the OHD pierhead. The Oxnard Harbor District was reimbursed $382,000 in August 1973 for the dredging within the Federal project limits.

9. Phase II construction was completed under Corps of Engineers contract in September 1975. Construction consisted of dredging the central basin and a portion of channel A to 35 feet from the existing depth of approximately 32 feet. Approximately 160,000 cubic yards were dredged at a cost of $579,000.

10. In 1984 maintenance dredging was required in the approach channel, entrance channel, central basin, and channel A using Federal operation and maintenance funds. This is the first time that maintenance dredging has been conducted since authorization. Dredging was completed in June 1984 and 302,000 cubic yards were removed at a construction cost of $1,215,250.

11. An Environmental Impact Statement (EIS) was prepared in February 1974. It concluded that the predicted increase of shipping in Port Hueneme Harbor would slightly disrupt marine life in the harbor. The ecosystem within the harbor would be temporarily affected by the proposed construction and dredging operations but any long term effects would be negligible.

12. In December 1984 the Oxnard Harbor District re-acquired 19.9 acres of land from the United States Navy in accordance with the Omnibus Defense Authorization Act of 1983, PL 98-115. The 19.9 acres include the use of the 655 foot U.S. Navy wharf No. 2, submerged land at the northeastern end of channel A, and approximately 15 acres of backlands. The area re-acquired from the Navy is shown in plate 1.

DESCRIPTION OF PORT HUENEME HARBOR

Port Hueneme Harbor is located adjacent to the U.S. Navy Construction Battalion Center. The facilities in the harbor are maintained and operated by the Oxnard Harbor District and the U.S. Navy.

HARBOR FACILITIES

13. OXNARD HARBOR DISTRICT. The existing harbor facilities operated and maintained by the Oxnard Harbor District (shown in plate 4) consist of the following:

a. Wharf No. 1. This is the OHD's main cargo wharf. It is 1800 feet long, providing room for three deep draft berths. The concrete apron is 62 feet wide and the deck elevation is at +13 feet. The wharf consists of a cast-in-place concrete deck supported by pre-stressed concrete piles.

b. U.S. Navy Wharf No. 2. Acquired by OHD in December 1984, this wharf is approximately 655 feet long, 94 feet wide, and 14 feet above MLLW. It provides room for one deep draft berth. The construction of this wharf is similar to wharf No. 1.

c. Channel Wharf. This wharf, which is located south of the entrance channel and next to the end of wharf No. 1, is approximately 390 feet long and 31 feet wide. This wharf has facilities for unloading and processing kelp; fish escalators for unloading commercial fishing boats; and a livestock chute where cattle and sheep are loaded and unloaded for transportation to and from the Santa Barbara Channel Islands.

d. Staging Wharves. Two small timber wharves are located easterly of wharf No. 2, on the north side of the channel. Each measures 50 feet along the face and 70 feet in width.

e. Warehouses. Three warehouses containing 123,200 square feet are in the area of wharf No. 1. These structures are utilized for the accomodation of transit cargoes.

f. Open Storage. The Harbor District has approximately 27 acres of leasable land in the harbor area. The majority of the land is leased for the accomodation of offshore oil equipment, stevedoring gear and equipment, bunkering and diesel fuel facilities, and parking facilities for the local labor force and tenant activities.

g. Small Boat Moorings. Boat slips consisting of floating wood platforms are at the east end of channel A. They have a capacity to accommodate six commercial and sportfishing boats.

14. U.S. NAVY. The U.S. Navy maintains and operates approximately 4,350 feet of concrete wharfs around the perimeter of the central basin. Port Hueneme Harbor is the home port for the NORTON SOUND, target destroyers, and towing vessels. Military Sealift Command (MSC) ships, Navy fleet ships, and charters also utilize the Navy wharves. Recovery boats to be used for retrieving jettisoned fuel pods from future Space Shuttle rockets launched from Vandenberg Air Force Base are home ported in the harbor. In addition to peacetime operation, the Navy utilizes the harbor for mobilization. The Navy utilized OHD facilities for national mobilization purposes in 1942 and again during the Vietnam conflict. In the purchase agreement of the Navy Wharf No. 2 and adjacent lands, the Government has reserved the right to re-enter and utilize the area and all improvements made thereon upon determination by the Secretary of Defense.

HARBOR CONDITIONS

15. Current port and terminal facilities operated by the Oxnard Harbor District are being utilized beyond capacity. The amount of berthing areas for ocean going cargo vessels and oil supply boats are not sufficient to handle the current and projected traffic for the port. Although the total amount of tonnage through the port since 1962 is below the peak tonnage of 1979, the amount of vessel visits by oil supply boats has increased significantly. The increased vessel visits are due to the activity of the offshore oil industry in the Santa Barbara Channel. A reinstituted license agreement between the Navy and the Oxnard Harbor District (OHD) permits commercial ships to berth at Navy wharves on a space-available basis when wharf No. 1 is filled. The vessels must immediately leave the Navy wharf when a berth is available on OHD wharves to load and unload. (There have been 721 instances over a 12-month period in 1979 when a commercial ship or a supply boat has tied up at a Navy wharf for part of a day.) To accommodate the large quantity of supply boats calling at Port Hueneme, OHD will often moor the vessels two abreast along the length of wharf No. 1. There have been instances where vessels were moored eight abreast and encroached 200 feet into channel A. This increases congestion in the harbor and presents a hazard to vessels attempting to navigate the 275 foot wide channel.

16. OPERATIONS. Vessels entering and leaving Port Hueneme Harbor are assisted by commercially operated tugs and harbor pilots. The overall authority in the harbor is the U.S. Navy. The Oxnard Harbor District maintains their commercial facilities and operations in the harbor.

17. COMMERCE. Commerce through Port Hueneme Harbor has grown steadily since the project was authorized in 1968. Table 1 indicates the amount of tonnage through the harbor by the type of commodity for years 1975 to 1984. Import and export tonnage increased from 142,466 short tons in 1968 to a peak of 1,527,774 short tons in 1981. For the years 1982 and 1983 the total tonnage through the harbor was reduced to 486,420 and 592,700 short tons respectively. The reduction in tonnage is due mainly to the cancellation of approximately 1,100,000 tons per year of residual fuel oil for the nearby Southern California Edison Ormond Beach facility. The facility switched to use of natural gas for its main source of fuel in 1982. Since 1979, the commodities through the harbor that have increased significantly are automobiles, bananas, offshore fuel and supplies, and citrus products.

18. VESSEL TRAFFIC. Vessel visits at Port Hueneme Harbor have increased significantly since 1968. Table 2 indicates the number of vessel visits through the harbor according to drafts. The number of visits by vessels of 19 feet draft and above have increased steadily. Deep draft merchant vessel visits have increased from 75 in 1975 to 271 in 1984. For smaller vessels the number of visits increased from 154 in 1980 to 1,437 visits in 1982. Oil supply boats serving platforms in the Santa Barbara Channel have increasingly used Port Hueneme Harbor as a home base for supplies. This activity is expected to peak in the years 1990 to 1995.

19. OFFSHORE ACTIVITY. There are 14 existing offshore oil-producing platforms in Santa Barbara Channel. These platforms are supported by an average total of 52 boats, both supply and crew, operating out of Port Hueneme. The harbor is identified as the primary equipment staging and operational support base. Construction support required of the Port consists of short-term marshalling and storage of various machinery, equipment, and supplies for the offshore platforms.

ADDENDUM I

CARGO FORECASTS AND TONNAGE ESTIMATES

Table #1	Vessel Forecast for Port Hueneme Harbor Supplemental No. 1 to Design Memorandum No. 1
Table #2	General Cargo Tonnage Fiscal Year 1984-1985 California Association of Port Authorities
Table #3	Cargo Projections and Financial Forecast Official Statement, 1986 Revenue Bond, Oxnard Harbor District

TABLE 1
VESSEL FORECAST FOR PORT HUENEME HARBOR
1985

COMMODITY	REQUIRED DEPTH	TONNAGE PER YEAR (M. TONS)	NUMBER OF VISITS	AVERAGE TURNAROUND TIME (HOURS)	TOTAL BERTH HOURS
Automobiles	24	97,000	50	24	1,200
Bananas	22	176,000	69	96	6,600
Citrus	30	12,000	12	48	576
Wood Pulp	35	37,000	5	48	240
Other, Non-oil Related	20-30	68,000	133	24	3,200
SUBTOTAL for 1985		390,000	269		11,816
Oil Related Supplies for 1985	20	215,000	1,700	8	13,600
TOTAL for 1985		605,000			25,416

YEARS 1995-2035

COMMODITY	REQUIRED DEPTH (FEET)	TONNAGE PER YEAR (M. TONS)	NUMBER OF VISITS PER YEAR	AVERAGE TURNAROUND TIME (HOURS)	TOTAL BERTH HOURS PER YEAR
Automobiles	24	110,000	50	24	1,200
Bananas	22	350,000	113	96	10,848
Citrus	30	50,000	24	48	1,152
Lumber	24	60,000	18	36	648
Salt	30	150,000	15	48	720
Potash, Soda Ash, Borax	35	50,000	50	48	2,400
Wood Pulp	35	36,000	6	48	288
Steel Products	35	120,000	12	48	576
SUBTOTAL for 1995-2035		926,000	288		17,832
Oil Related Supplies (1995)	20	900,000	3,300	8	26,400
TOTAL for 1995		1,826,000	3,579		44,232
Oil Related Supplies (2005-2035)	20	215,000	1,700	8	13,600
TOTAL for 20[illegible]-2035		1,126,000	1,979		31,432

CALIFORNIA ASSOCIATION OF PORT AUTHORITIES

General Cargo Tonnage Reported For 1984-85
(Metric Revenue Tons In Thousands)

Rank	Port	Tonnage	Change From: Last Year	Change From: Ten Yrs. Ago	Market Share: This Year	Market Share: Last Year	Market Share: Ten Yrs. Ago
1	Long Beach	22,584.4	0%	249%	37%	42%	30%
2	Los Angeles	22,200.0	36%	328%	36%	31%	24%
3	Oakland	12,569.1	15%	110%	20%	21%	27%
4	San Francisco	2,394.0	51%	-18%	4%	3%	13%
5	Hueneme	604.7	16%	1,090%	1%	1%	0%
6	San Diego	555.1	44%	78%	1%	1%	1%
7	Encinal Terminals	262.9	2%	-35%	0%	0%	2%
8	Sacramento	243.4	-7%	42%	0%	0%	1%
9	Stockton	231.5	24%	238%	0%	0%	0%
10	Richmond	147.7	-41%	-52%	0%	0%	1%
11	Redwood City	.0	0%	0%	0%	0%	0%
	Total, General Cargo	61,792.8	16%	182%	100%	100%	100%
	Southern California Ports	45,944.3	16%	282%	74%	75%	55%
	Northern California Ports	15,848.5	18%	61%	26%	25%	45%
	Large Ports(L.B.,L.A.,Oak.)	57,353.5	16%	225%	93%	94%	81%
	Small Ports(8 Others)	4,439.3	29%	5%	7%	6%	19%

Table C [redacted]

FORECAST TRAFFIC
(in revenue tons and dollars)

COMMODITIES		Fiscal Year from July 1 to June 30				
		1985-86	1986-87	1987-88	1988-89	1989-90
General Cargo						
Autos/Pickups	r.t.[1]	110,000	110,000	110,000	120,000	120,000
(Mazda)	w & d[2]	$396,000	400,000	420,000	490,000	510,000
(Other)	r.t.	-0-	10,000	15,000	20,000	25,000
	w & d	-0-	110,000	180,000	250,000	330,000
Fresh Fruit	r.t.	120,000	120,000	120,000	120,000	120,000
(Del Monte)	w & d	$336,000	350,000	370,000	400,000	440,000
(Other	r.t.	30,000	40,000	40,000	45,000	45,000
Banana)	w & d	$135,000	180,000	190,000	230,000	240,000
Citrus	r.t.	20,000	25,000	25,000	30,000	30,000
	w & d	$ 76,000	90,000	100,000	130,000	130,000
Woodpulp	r.t.	40,000	42,000	45,000	47,000	50,000
	w & d	$168,000	180,000	200,000	220,000	25[illegible],000
Other[3] plus	r.t.	40,000	45,000	50,000	55,000	60,000
Linehandling	w & d	$330,000	380,000	440,000	510,000	580,000
Subtotal		$1,441,000	1,690,000	1,900,000	2,230,000	2,480,000
ROUNDED		$1,400,000	1,600,000	1,900,000	2,200,000	2,400,000
Offshore						
General Cargo	r.t.	240,000	300,000	300,000	360,000	360,000
& Fuel	w & d	$1,200,000	1,500,000	1,650,000	2,050,000	2,160,000
Water		$ 90,000	110,000	140,000	170,000	170,000
Demurrage		$ 60,000	75,000	80,000	100,000	100,000
Subtotal		$1,350,000	1,685,000	1,870,000	2,320,000	2,430,000
ROUNDED		$1,300,000	1,600,000	1,800,000	2,300,000	2,400,000

[1] r.t. = revenue tons
[2] w & d = wharfage and dockage revenues, including bunker fuel
[3] includes fresh and prepared fruit, seafoods, poultry products, wheat, lumber, iron/steel, and miscellaneous

ADDENDUM II

1. Oxnard Harbor District - A Fact Sheet
2. Cooperation by Local Interests

THE OXNARD HARBOR DISTRICT - A FACT SHEET

The Oxnard Harbor District's boundaries define an area of approximately 400 square miles overlapping the 21st Congressional District in Ventura County, California. It includes the incorporated cities of Oxnard, Port Hueneme, Camarillo, most of the developed area of Thousand Oaks, several unincorporated communities, and the U.S. Navy installations at Point Mugu.

Population of the District, estimated at 300,000, continues to grow rapidly. Assessed valuation of the District for the year 1984-85 was $9,783,773,913. Development within the District includes a broad range of substantial industrial, commercial, residential, agricultural, and governmental properties.

The District's facilities and administrative offices are located at the Port of Hueneme. The Port is the only deep-water harbor between Los Angeles and San Francisco. The District operates the commercial Port which provides a total of four deep-water berths capable of handling approximately 800,000 metric tons of general deep draft or medium draft cargo annually. Seven additional berths are available under a licensing agreement with the U.S. Navy, which operates a military port contiguous to the commercial Port. In addition, the District's facilities include 275,000 square feet of covered storage space in five warehouses and a manufacturing building, 5,500 square feet of office space, 5,400 square feet in its administration building, and miscellanеous facilities for bananas, cattle, fish, sportfishing, etc.

The District is operationally self-supporting and has met all general obligation bond service costs without the need of any tax levy for the past eight years.

The District is governed by a five member Board of Harbor Commissioners who are elected at large by the electorate within the District's boundaries. The present Commissioners are: Ray A. Fletcher, President, Oxnard; Cecil L. Schnelle, Vice President, Thousand Oaks; Bob H. Jennings, Secretary, Camarillo; Leo J. Ramirez, Port Hueneme and Stanley J. Daily, Camarillo. The District's Washington representatives are former Congressman Bob Wilson ([202] 484-2970) and Del Smith ([202] 638-5023).

As the only deep-water terminal between Los Angeles and San Francisco, the Port is obviously well situated for freight transportation. The Port is located at the mouth of a deep undersea canyon. Vessel entrance and exit times are therefore minimal and the Port requires very little maintenance dredging. Port Hueneme's advantages vis-a-vis competing ports in the Los Angeles basin or San Francisco Bay area are land and facilities costs, operating flexibilities, labor productivity, less congested freeway and rail system service, and its proximity to the growing areas of northern Los Angeles and Ventura County.

US Department
of Transportation
United States
Coast Guard

Commander
Eleventh Coast Guard District

Union Bank Bldg.
400 Oceangate
Long Beach, CA 90822
Staff Symbol: (oan)
(213) 590-2222

16500
Ser: oan-362-85
29 July 1985

From: Commander, Eleventh Coast Guard District
To: District Engineer, Corps of Engineers, Los Angeles District

Subj: PORT HUENEME HARBOR

1. I have reviewed the draft design document for Port Hueneme Harbor. I concur with the recommended project depth of 20 feet for the channel widening and extension project.

2. The recommended project design will maintain the existing width of 600 feet for the approach channel and 330 feet for the entrance channel. The channel width is reduced by almost half at the entrance channel. Vessels frequently encounter subsurface current as they approach this narrow portion of the channel.

3. I recommend you conduct a cost/benefit study for a project to widen the entrance channel to a width of 400 feet to allow deep draft vessels more room to maneuver in this portion of the channel.

W. A. McDONOUGH
By direction

PORT HUENEME PILOTS ASSOCIATION
1428 Foothill Road
Ojai, CA 93023
(805) 646-0469

July 1, 1985

Oxnard Harbor District
P. O. Box 608
Port Hueneme
California 93041

Gentlemen:

It has been called to our attention that at present the Army Corps of Engineers has projected a dredged depth of 20 ft. in the berthing area adjacent to the expanded Wharf #2 project. We would like to take this opportunity to express to you that we feel this would not be in the best interest of safely handling ships in and out of the wharves at Port Hueneme.

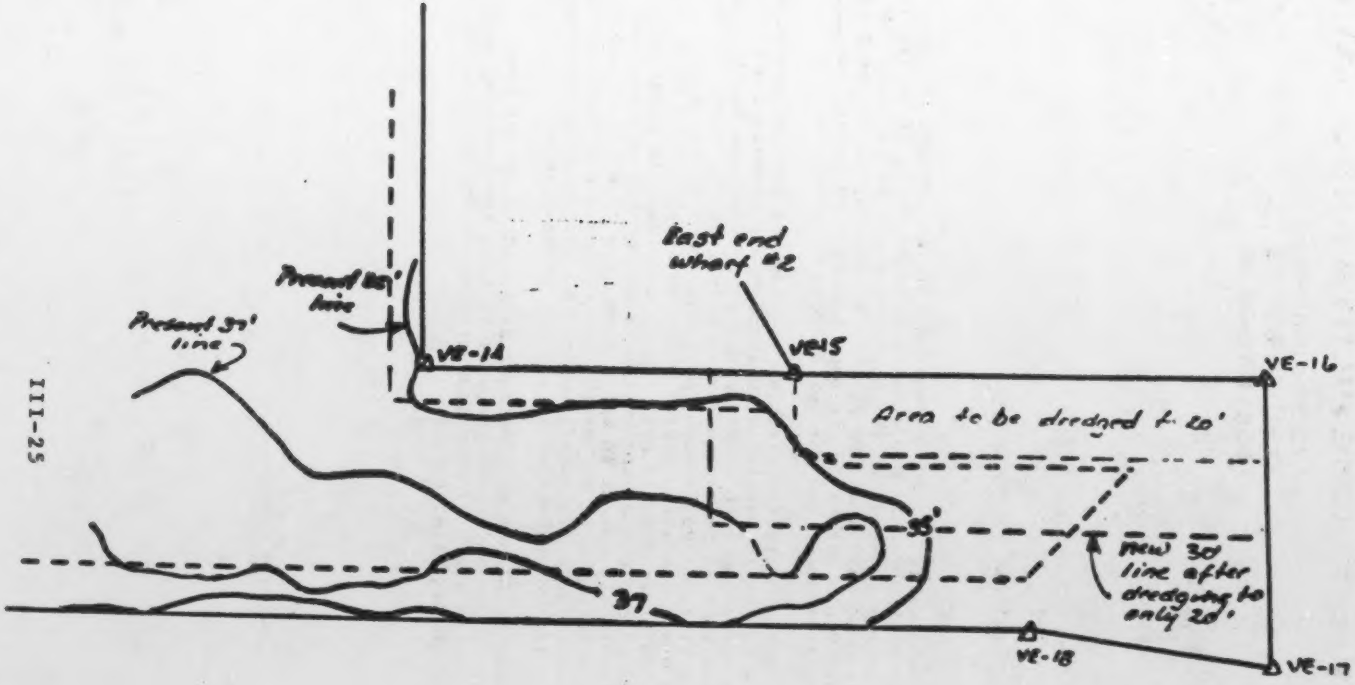
As the bottom characteristics at the Port of Hueneme are soft mud, the bottom is particularly susceptible to scouring by vessels operating with considerable power near the bottom. If this dock were to be expanded with only a 20 ft. depth in the berthing area, it would then be mainly used by oil supply vessels whose operating drafts would be in the 15 to 20 ft. range. As these vessels have to use considerable power to manuever in and out of the berth, we are of the opinion that this would inevitably result in the bottom area of Wharf #2 being displaced into the 35 ft. depth area of Berth #1. Such shoaling could cause large deep draft vessels to unexplicably shear or ground while being handled in and out of Wharf #1.

Therefore, it is our opinion that it would be in the best interest of the safety of the port to have the berthing area off the projected Wharf #2 expansion dredged to 35 ft. to match the depth of the existing berths.

Sincerely,

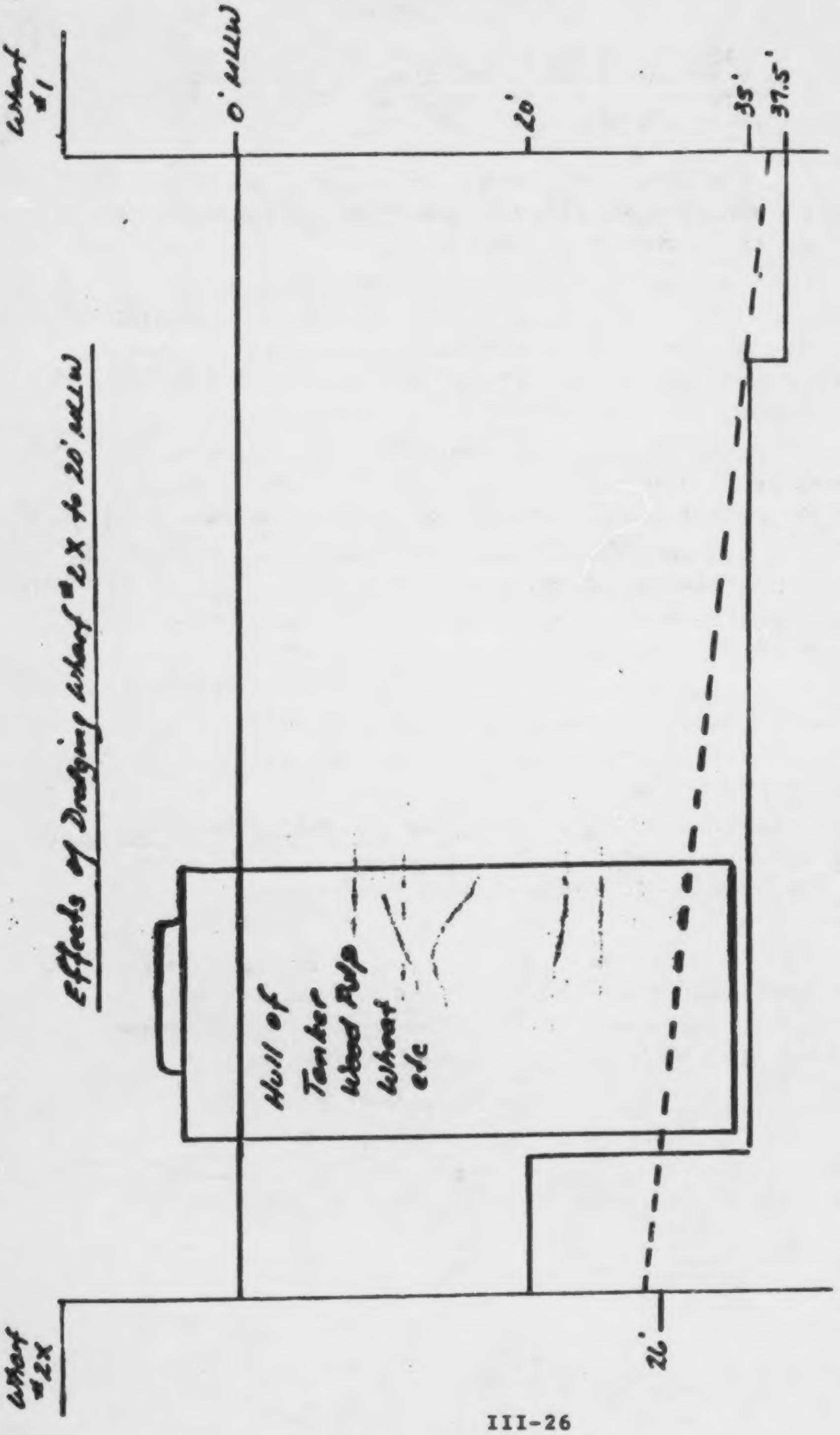
Carl R Dingler

Capt. Carl R. Dingler
President



East end
wharf #2
Present 20'
line
Present 37'
line
VE-14
VE15
VE-16
Area to be dredged t. 20'
35'
37
New 30'
line after
dredging to
only 20'
VE-18
VE-17

Effects of Dredging Wharf #2X to 20' MLLW


Wharf #1
0' MLLW
20'
35'
37.5'
Hull of Tanker Wood Pulp Wheat etc
Wharf #2X
26'

RESOLUTION NO. 487

A RESOLUTION OF THE BOARD OF HARBOR COMMISSIONERS OF THE OXNARD HARBOR DISTRICT URGING CONGRESSIONAL SUPPORT TO SECURE U. S. NAVY WHARF NO. 2 AND 22 ACRES OF BACK-UP LAND

WHEREAS, the Oxnard Harbor District was formed in 1937 for the purpose of building and operating a commercial harbor at the Port of Hueneme; and

WHEREAS, the electorate of the Oxnard Harbor District overwhelmingly approved the issuance of 1.75 million dollars in General Obligation Bonds and in 1940 completed the construction of the original Port of Hueneme harbor basin, breakwaters and 1,200 feet of wharf; and

WHEREAS, the land ownership of the Oxnard Harbor District required for the construction and orderly growth of the Port of Hueneme consisted of 322 acres of land; and

WHEREAS, the Federal Government, acting for the U. S. Navy took possession of the entire commercial Port of Hueneme on March 31, 1942, based on a court order filed on March 16, 1942, in support of World War II efforts; and

WHEREAS, the Oxnard Harbor District in 1947 was granted a leasehold interest on 22 acres of land and a wharf facility within which to operate and conduct commercial port activities; and

WHEREAS, the Oxnard Harbor District on December 15, 1961, was granted the right to reacquire the 22 acres of the original 322 acre commercial Port of Hueneme complex; and

WHEREAS, the Oxnard Harbor District has diligently and effectively planned, financed and constructed modern deep water commercial port facilities at the Port of Hueneme and has added to the 22 acres reacquired from the U. S. Navy; and

WHEREAS, the Oxnard Harbor District has now developed its commercial port facilities into a viable economic contributor to the economy of Ventura County at no cost to the taxpayers; and

WHEREAS, the activities conducted from the Oxnard Harbor District's commercial port facilities now account for over 2,400 jobs and a 28 million dollar annual payroll, and growing at a rapid rate; and

WHEREAS, the Oxnard Harbor District now has an urgent need for long term usage of land and wharf facilities within which to accommodate not only current commercial port related business but provide for the orderly growth of the commercial port; and

WHEREAS, the U. S. Navy at its Construction Battalion Center in Port Hueneme presently owns approximately 1,650 acres of land and five wharf facilities; and

WHEREAS, included within the 1,650 acres are 300 acres which formerly were owned and operated by the Oxnard Harbor District; and

WHEREAS, the acquisition of one U. S. Navy Wharf and supportive back-up land areas will enable the Oxnard Harbor District to provide for the orderly growth of the commercial port activities and concurrently upgrade such facilities at no cost to the taxpayers; and

WHEREAS, this Board of Harbor Commissioners of the Oxnard Harbor District is prepared to gradually upgrade the port facilities in order to make the port a more viable and efficient complex, not only during peacetime but in the event of a national emergency; and

WHEREAS, based on an engineering and economic feasibility report prepared for the District in February 1980, the Board of Harbor Commissioners has adopted a conceptual plan designated "Alternative F-3" as the foundation for implementing a harbor expansion program, a copy of which is attached hereto for reference purposes as Exhibit I;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Harbor Commissioners of the Oxnard Harbor District hereby respectfully urges U. S. Senators and Congressmen from Calfiornia to initiate federal legislation authorizing the Oxnard Harbor District to reacquire U. S. Navy Wharf No. 2 and 22 acres of back-up land area at the Port of Hueneme (as indicated on Exhibit I) in order to provide for the continued orderly growth of commercial waterborne domestic and foreign commerce.

ADOPTED, SIGNED and APPROVED this 12th Day of March 1980.

Bob H. Jennings
BOB H. JENNINGS, President
Board of Harbor Commissioners
Oxnard Harbor District

Leo J. Ramirez
LEO J. RAMIREZ, Vice President

Stanley J. Daily
STANLEY J. DAILY, Secretary

Ray A. Fletcher
RAY A. FLETCHER, Commissioner

Cecil L. Schnelle
CECIL L. SCHNELLE, Commissioner

RESOLUTION NO. 491

A RESOLUTION OF THE OXNARD HARBOR DISTRICT BOARD OF HARBOR COMMISSIONERS REQUESTING IMPLEMENTATION OF PHASE III OF THE PORT HUENEME HARBOR, CALIFORNIA PROJECT

WHEREAS, the Los Angeles District Corps of Engineers' Design Memorandum No. 1, General Design, Port Hueneme Harbor, California, dated February 1974, recommended a three phased plan (Phase I, II and III), and

WHEREAS, Phase I and Phase II of the plan have been constructed,

WHEREAS, Phase III of the recommended plan was deferred pending demonstration of need, and

WHEREAS, this project is authorized by the Congress as an Army Corps of Engineers project, and

WHEREAS, cargo movements through Port Hueneme Harbor have increased significantly since 1973, and

WHEREAS, the wharf facilities and land areas of the Oxnard Harbor District used for commercial cargo operations have now reached a maximum utilization factor, and

WHEREAS, the Board of Harbor Commissioners of the Oxnard Harbor District commissioned the preparation of an Engineering and Economic Feasibility Study for a new wharf and related land facilities, which study was completed February 1980, and

WHEREAS, based on such study, the Board of Harbor Commissioners of the Oxnard Harbor District unanimously agreed on pursuing a modified version of Phase III of the approved navigation project, known as Alternative "F-3",

NOW, THEREFORE, BE IT RESOLVED, that the Oxnard Harbor District will meet local requirements for a modified version of Phase III of the recommended plan of improvement for lengthening Channel "A", and

BE IT FURTHER RESOLVED, that the Oxnard Harbor District hereby requests the Army Corps of Engineers to take all necessary actions to implement the completion of the recommended project.

ADOPTED, SIGNED and APPROVED, this 12th Day of May, 1980.

Leo J. Ramirez

LEO J. RAMIREZ, Vice President
Board of Harbor Commissioners
Oxnard Harbor District

ATTEST:

STANLEY J. DAILY, Secretary
Board of Harbor Commissioners
Oxnard Harbor District

CERTIFICATE OF SECRETARY

I hereby certify that I am the duly appointed Secretary of the Board of Harbor Commissioners of the Oxnard Harbor District thereof. The foregoing resolution was duly adopted by the Board of Harbor Commissioners of the Oxnard Harbor District at its regular meeting held May 12, 1980, at Port Hueneme, California.

DATED: 12 May 1980

STANLEY J. DAILY, Secretary
Board of Harbor Commissioners
Oxnard Harbor District

BOARD OF
HARBOR
COMMISSIONERS

BOB H. JENNINGS
President

LEO J. RAMIREZ
Vice President

STANLEY J. DAILY
Secretary

RAY A. FLETCHER
Commissioner

CECIL L. SCHNELLE
Commissioner

PORT MANAGEMENT

EDWARD J. MILLAN
General Manager

JOHN W. ELMORE
Assistant Manager

port of hueneme

OXNARD HARBOR DISTRICT
POST OFFICE BOX 608
PORT HUENEME, CALIFORNIA 93044 (805) 488-3677

May 14, 1980

Gwynn A. Teague, Colonel, C.E.
District Engineer
Department of the Army
Los Angeles District, Corps of Engineers
Post Office Box 2711
Los Angeles, California 90053

Re: Port Hueneme Harbor Project

Dear Sir:

The Oxnard Harbor District Board of Harbor Commissioners recently adopted a conceptual plan for the orderly expansion of the Port of Hueneme. This conceptual plan was part of an Engineering and Economic Feasibility Study prepared for the District by the engineering firm of Moffatt and Nichol. The conceptual plan adopted is referred to as Alternate "F-3" (Exhibit 19C of the Study). A copy of the Moffatt and Nichol Study which includes Alternative "F-3" is enclosed as a matter for your information and review.

The Alternative "F-3" conceptual plan involves a modified version of Phase III of the Port Hueneme Harbor Project previously approved by the Congress. It consists of widening Channel "A" by removing U. S. Navy Wharf #2 and a portion of U. S. Navy Wharf #3 and dredging and setting back a new pierhead line approximately 120 feet north of existing Navy Wharf #2. A new wharf would then be proposed for construction totalling approximately between 1,350 feet to 1,600 feet. Channel "A" would then contain sufficient width to permit a safer navigational operation.

VENTURA COUNTY'S ONLY DEEP WATER PORT

Since this conceptual plan requires access to U. S. Navy property, the Board of Harbor Commissioners has submitted a proposal to the U. S. Navy for their consideration. A meeting with the Navy officials is scheduled for early next month.

The Board of Harbor Commissioners recognizes the lengthy permitting process entailed in starting and completing a project such as is proposed. It also recognizes the Corps of Army Engineers must undertake a study of the proposed project to insure its viability. Accordingly, and in order to commence the initial preliminary work involved, the Board adopted Resolution No. 491 which is enclosed herewith for your consideration.

Upon your review of the enclosures, we stand ready to meet with you to discuss any aspect of the proposed navigation project for the Port of Hueneme.

Very truly yours,

EDWARD J. MILLAN
General Manager

EJM/gl

Encl.

RESOLUTION NO. 569

RESOLUTION OF THE BOARD OF HARBOR
COMMISSIONERS APPROVING THE PRICE
FOR NAVY PROPERTY AND EXPRESSING
INTENT TO ISSUE REVENUE BONDS

WHEREAS, Public Law 98-115 directed the U.S. Navy to sell certain property to the Oxnard Harbor District at the fair market value of such property; and,

WHEREAS, the Oxnard Harbor District after lengthy negotiations has now arrived at a tentative agreement with the U.S. Navy on the price to be paid for such property; and,

WHEREAS, the Oxnard Harbor District intends to finance the Navy property acquisition and related improvements thereto with Revenue Bonds;

NOW, THEREFORE, BE IT RESOLVED that

1. The Oxnard Harbor District does hereby approve a purchase price of $7,000,000 (seven million dollars) for the reacquisition of an approximate 19 acre parcel of land and property thereon.

2. The Oxnard Harbor District expresses its intent to issue at one time or from time to time, a principal amount of bonds not to exceed $20,000,000 (twenty million dollars) (the "initial cap bonds") of the initial cap distribution for the finance of the expansion of port facilities, consisting of the reacquisition of the approximately 19 acres of land and a 650' wharf from the U.S. Navy and the extension of the wharf for deep draft vessels.

3. Such initial cap bonds shall be issued subject to the conditions that, (1) the District and the purchaser of the initial cap bonds shall have first agreed to mutually acceptable terms for the bonds and for the sale and delivery thereof and, (2) all requisite governmental approvals shall have been first obtained.

4. The Oxnard Harbor District intends that this resolution shall constitute "some other similar action" toward the issuance of bonds within the meaning of Section 1.103-8(a)(5) of the Treasury Regulations promulgated under Section 103 of the Internal Revenue Code of 1954, as amended.

ADOPTED, SIGNED and APPROVED this 30th day of August 1984

STANLEY S. [illegible], President
BOARD OF HARBOR COMMISSIONERS
OXNARD HARBOR DISTRICT

ATTEST:

Cecil L. Schnelle
CECIL L. SCHNELLE, Secretary
BOARD OF HARBOR COMMISSIONERS
OXNARD HARBOR DISTRICT

RESOLUTION NO. 572

RESOLUTION OF THE BOARD OF HARBOR COMMISSIONERS ACCEPTING A QUITCLAIM DEED AND TEMPORARY EASEMENT DEED GRANTING AN EASEMENT, DND AUTHORIZING PAYMENT OF $7,000,000.00

Pursuant to the written Agreement for Purchase of Real Property between the Oxnard Harbor District and the United States of America, the Board of Harbor Commissioners of the Oxnard Harbor District does hereby resolve, determine and order that:

1. The quitclaim deed from the United States of America to the Oxnard Harbor District, a copy of which is attached to this Resolution as Exhibit A is accepted.

2. The grant of a temporary easement from the United States of America to the Oxnard Harbor District, a copy of which is attached to this Resolution as Exhibit B, is accepted.

3. The grant of easement from the Oxnard Harbor District to the United States of America in the form of Exhibit C attached hereto and incorporated herein by reference is approved. The president and secretary of the Oxnard Harbor District are authorized and directed to execute the grant of easement on behalf of the Oxnard Harbor District and to cause it to be delivered to the United States of America.

4. The payment of $7,000,000.00 by the Oxnard Harbor District to the United States of America in exchange for the quitclaim deed mentioned in paragraph 1 of this Resolution is approved. The payment shall be made by certified check in accordance with paragrph 3 of the written Agreement for Purchase of Real Property between the Oxnard Harbor District and the United States of America.

Adopted this 10th day of December 1984.

STANLEY J. DAILY, President
Board of Harbor Commissioners
Oxnard Harbor District

ATTEST:

Cecil L. Schnelle
CECIL L. SCHNELLE, Secretary
Board of Harbor Commissioners
Oxnard Harbor District

CERTIFICATE OF SECRETARY

I, Cecil L. Schnelle, am the duly elected and acting Secretary of the Oxnard Harbor District and of the Board of Harbor Commissioners. The foregoing Resolution No. 572 is a true copy of the Resolution adopted by the Board of Harbor Commissioners of the Oxnard Harbor District at its regular meeting held on Monday, December 10, 1984.

Dated: December 10, 1984

Cecil L. Schnelle

CECIL L. SCHNELLE, Secretary
Board of Harbor Commissioners

(Seal)

RECORDED AT REQUEST OF
AND RETURN TO:

OXNARD HARBOR DISTRICT
P.O. BOX 608
PORT HUENEME, CALIF, 93041

QUITCLAIM DEED

FOR THE VALUABLE CONSIDERATION of SEVEN MILLION DOLLARS ($7,000,000.00), receipt of which is hereby acknowledged, the UNITED STATES OF AMERICA, acting by and through the Department of the Navy, Western Division, Naval Facilities Engineering Command, hereinafter called GOVERNMENT, under and pursuant to the power and authority specified in Section 812 of Public Law 98-115 of October 11, 1983, hereby remises, releases and quitclaims to the OXNARD HARBOR DISTRICT, a political subdivision of the State of California, hereinafter called the DISTRICT, all of the Government's right, title and interest in and to that certain real property situated at the Naval Construction Battalion Center, Port Hueneme, California described as follows:

THAT PORTION OF SUBDIVISION 87, RANCHO EL RIO DE SANTA CLARA O'LA COLONIA IN THE CITY OF PORT HUENEME, COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP RECORDED IN BOOK 3, PAGE 13 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY,
BEGINNING AT THE NORTHWEST CORNER OF THE TOWN OF HUENEME, ACCORDING TO THE MAP RECORDED IN BOOK 1, PAGE 179 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE VENTURA COUNTY RECORDER, SAID CORNER BEING MARKED BY A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982 AS SHOWN ON A MAP RECORDED IN BOOK 41, PAGE 52 OF RECORDS OF SURVEY IN THE VENTURA COUNTY RECORDER'S OFFICE, THIS BEING THE TRUE POINT OF BEGINNING PROCEED NORTH 89° 52' 38" EAST 374.00 FEET, ALONG THE NORTH LINEOF SAID TOWN OF HUENEME AS SHOWN ON SAID RECORD OF SURVEY, TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982 HEREINAFTER REFERRED TO A POINT "A"; THENCE LEAVING SAID NORTH LINE, NORTH 45° 07' 22" WEST 35.36 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE SOUTH 89° 52' 38" WEST 350.18 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982 HEREINAFTER REFERRED TO A POINT "K"; THENCE NORTH 00° 13' 00" WEST 24.44 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "B"; THENCE CONTINUING NORTH 00° 13' 00" WEST 472.08 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982 (TO A POINT HEREINAFTER REFERRED TO AS POINT "X"); THENCE SOUTH 89° 47' 00" WEST 220.73 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "C"; THENCE CONTINUING SOUTH 89° 47' 00" WEST 38.13 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE SOUTH 00° 13' 00" EAST 441.52 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE SOUTH 25° 10' 36" WEST 162.12 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "D"; THENCE CONTINUING SOUTH 25° 10' 36" WEST 261.96 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE SOUTH 00° 13' 00" EAST 280.00 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE NORTH 89° 47' 00" EAST 30.00 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE SOUTH 00° 13' 00" EAST 215.55

FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE SOUTH 89° 47' 00" WEST 30.00 FEET TO A POINT LYING SOUTH 89° 47' 00" WEST 1.00 FEET FROM A COPPERWELD SURVEY MARKER WITH PUNCHMARK; THENCE SOUTH 00° 13" 00" EAST 70.00 FEET TO A POINT LYING SOUTH 89° 47' 00" WEST 1.00 FEET FROM A COPPERWELD SURVEY MARKER WITH PUNCHMARK; THENCE SOUTH 89° 47' 00" WEST 140.00 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE NORTH 00° 13' 00" WEST 5.00 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE SOUTH 89° 47' 00" WEST 140.00 FEET TO A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982; THENCE SOUTH 46° 29' 32" WEST 172.43 FEET TO A BRASS TAG L.S. 2982 SET IN LEAD, HEREINAFTER REFERRED TO A POINT "E"; THENCE SOUTH 00° 00' 35" EAST 69.00 FEET TO A POINT 9.00 FEET SOUTH OF A BRASS TAG L.S. 2982 SET IN LEAD; THENCE SOUTH 89° 59' 25" WEST 72.00 FEET TO A POINT 9.00 FEET SOUTH OF A BRASS TAG L.S. 2982 SET IN LEAD; THENCE SOUTH 00° 03' 07" EAST 263.82 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF THE PARCEL DESCRIBED IN THAT CERTAIN QUITCLAIM DEED RECORDED IN BOOK 2103, PAGE 143 OF OFFICIAL RECORDS IN THE VENTURA COUNTY RECORDER'S OFFICE; THENCE ALONG SAID NORTH LINE THE FOLLOWING THREE COURSES:

NORTH 89° 56' 53" EAST 609.59 FEET,
SOUTH 00° 03' 07" EAST 13.20 FEET, AND EASTERLY ALONG A NON-TANGENT CURVE, THE RADIUS POINT OF WHICH BEARS SOUTH 13° 50' 50" WEST 360.21 FEET THROUGH A CENTRAL ANGLE OF 18° 08' 14", AN ARC DISTANCE OF 114.03 FEET, (CHORD SOUTH 67° 05' 03" EAST 113.55 FEET;)

THENCE ALONG THE SOUTH LINE OF THE PARCEL DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED IN BOOK 4235, PAGE 562 OF OFFICIAL RECORDS IN THE VENTURA COUNTY RECORDER'S OFFICE, NORTH 89° 46' 07" EAST 93.29 FEET TO THE SOUTHEAST CORNER THEREOF; THENCE ALONG THE EAST LINE OF SAID PARCEL NORTH 00° 13' 53" WEST 221.70 FEET TO A POINT ON THE SOUTH LINE OF THE PARCEL DESCRIBED IN THAT CERTAIN QUITCLAIM DEED RECORDED IN BOOK 5335, PAGE 848 OF OFFICIAL RECORDS IN THE VENTURA COUNTY RECORDER'S OFFICE; THENCE ALONG SAID SOUTH LINE NORTH 89° 54' 47" EAST 58.17 FEET TO THE SOUTHEAST CORNER THEREOF, SAID CORNER LYING SOUTH 00° 13' 00" EAST 51.91 FEET FROM A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982 AS SHOWN ON MAP RECORDED IN BOOK 41, PAGE 52 OF RECORDS OF SURVEY IN THE VENTURA COUNTY RECORDER'S OFFICE; THENCE ALONG THE EAST LINE OF SAID PARCEL, NORTH 00° 13' 00" WEST 109.50 FEET TO THE NORTHEAST CORNER THEREOF, SAID POINT BEING THE SOUTHWEST CORNER OF THE PARCEL DESCRIBED IN THAT CERTAIN QUITCLAIM DEED RECORDED IN BOOK 5335, PAGE 837 OF OFFICIAL RECORDS IN THE VENTURA COUNTY RECORDER'S OFFICE; THENCE ALONG THE WEST LINE OF SAID PARCEL NORTH 00° 13' 00" WEST 151.13 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "F"; THENCE CONTINUING NORTH 00° 13' 00" WEST 5.00 FEET TO A POINT HEREINAFTER REFERRED TO A POINT "G"; THENCE CONTINUING NORTH 00° 13' 00" WEST 99.95 FEET TO THE NORTHWEST CORNER OF AFORESAID PARCEL; THENCE NORTH 89° 54' 47" EAST 55.00 FEET TO THE NORTHEAST CORNER OF SAID PARCEL, SAID CORNER

BEING MARKED BY A 2-INCH IRON PIPE WITH BRASS TAG L.S. 2982 ON THE WEST LINE OF AFORESAID TOWN OF HUENEME AND AS SHOWN ON THE AFOREMENTIONED RECORD OF SURVEY; THENCE ALONG SAID WEST LINE NORTH 00° 13' 00" WEST, 27.90 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "H"; THENCE CONTINUING NORTH 00° 13' 00" WEST, 759.06 FEET TO THE TRUE POINT OF BEGINNING. ABOVE PARCEL CONTAINS 19.82 ACRES, MORE OR LESS.

SUBJECT TO any and all outstanding easements for streets, utility systems, rights of way, railroads, pipelines, and/or covenants, restrictions, reservations, conditions, and agreements which now exist affecting the above-described property.

RESERVING to the GOVERNMENT and its assigns the following:

1. A covenant running with the remaining land of the GOVERNMENT to jointly use the existing storm drain systems on the conveyed land and to afford sheet flow drainage from said remaining land to the storm drain systems. In the event that the DISTRICT at any future date elects to alter the drainage flow to preclude drainage from GOVERNMENT's remaining land to said storm drain systems, then the DISTRICT shall, at no cost to the GOVERNMENT, adjust the grade and surfacing of the GOVERNMENT's remaining land and/or provide an alternate storm drain system acceptable to the GOVERNMENT. Said covenant area is identified as "Drainage Easement Covenant" on the Map marked Exhibit "A" attached hereto and made a part hereof.

2. An easement for storm drainage and utility purposes described as follows:

BEGINNING AT POINT "E" HEREINBEFORE DESCRIBED,
THENCE SOUTH 00° 00' 35" EAST 61.00 FEET; THENCE
NORTH 89° 59' 25" EAST 4.00 FEET; THENCE
NORTH 00° 00' 35" WEST 64.80 FEET; THENCE
SOUTH 46° 29' 32" WEST 5.51 FEET TO THE POINT OF BEGINNING.

3. Easements for existing water pipelines described as follows:

A STRIP OF LAND, 20 FEET IN WIDTH, LYING 10 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT POINT "C" HEREINBEFORE DESCRIBED,
THENCE SOUTH 00° 15' 00" EAST 1103.24 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "J"; THENCE CONTINUING
SOUTH 00° 15' 00" EAST 319.81 FEET; THENCE
SOUTH 88° 00' 00" EAST 64.97 FEET; THENCE
NORTH 00° 09' 00" WEST 12.37 FEET; THENCE
NORTH 89° 51' 00" EAST 101.11 FEET TO POINT "F" HEREINBEFORE DESCRIBED.

A STRIP OF LAND, 20 FEET IN WIDTH, LYING 10 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT POINT "J" HEREINBEFORE DESCRIBED FOR WATER PIPELINE, THENCE
NORTH 89° 45' 00" EAST 9.71 FEET, THENCE
SOUTH 46° 25' 00" EAST 203.81 FEET, THENCE

SOUTH 00° 13' 00" EAST 164.00 FEET, THENCE
NORTH 89° 51' 00" EAST 9.42 FEET TO POINT "G" HEREINBEFORE DESCRIBED.

4. An easement for power and communications lines described as follows:

A STRIP OF LAND, 20 FEET IN WIDTH, LYING 10 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT POINT "B", HEREINBEFORE DESCRIBED,
THENCE NORTH 89° 01' 46" WEST 58.42 FEET; THENCE
SOUTH 00° 22' 00" EAST 808.00 FEET; THENCE
SOUTH 88° 30' 00" EAST 57.46 FEET TO POINT "H" HEREINBEFORE DESCRIBED.

5. An easement for fence and fence maintenance purposes as follows:

A strip of land 1.00 foot wide, lying Southerly and Easterly of and perpendicular to and parallel with the following described property line of the HEREINBEFORE described property: BEGINNING at point "X", thence

South 89° 47' 00" West	258.86 FEET
South 0° 13' 00" East	441.52 FEET
South 25° 10' 36" West	424.08 FEET
South 0° 13' 00" East	280.00 FEET
North 89° 47' 00" East	30.00 FEET
South 0° 13' 00" East	215.55 FEET
South 89° 47' 00" West	30.00 FEET
South 0° 13' 00" East	70.00 FEET
South 89° 47' 00" West	140.00 FEET
North 0° 13' 00" West	5.00 FEET
South 89° 47' 00" West	140.00 FEET
South 46° 29' 32" West	172.43 FEET TO POINT "E"

APPROVED BY CADASTRAL
NAME 26 NOV [illegible] DATE

Each of these reserved easements shall terminate at such time as the GOVERNMENT or its assigns no longer requires the easement for the use or uses for which the easements are reserved.

In the event of a war or a national emergency declared by the Congress or a national emergency declared by the President, and upon a determination by the Secretary of Defense that the property hereby conveyed is necessary or would be useful for military or other national defense purposes, the United States shall have the right, upon payment to the DISTRICT of just compensation, to reenter upon the property and use the property or any part of it, including any and all improvements made thereon, for the duration of the war or emergency plus six months.

IN WITNESS WHEREOF, the GOVERNMENT has caused this quitclaim deed to be executed in its name and on its behalf by its duly authorized agent this 27th day of November, 1984.

UNITED STATES OF AMERICA

By: Warren K Branscum
WARREN K. BRANSCUM
Director, Real Estate Division
Western Division
Naval Facilities Engineering Command
For and on behalf of the
United States of America,
Department of the Navy

State of California)
) SS
County of San Mateo)

On this 27th day of November in the year 1984, before me, Beverly J. Freitas, a Notary Public in and for said County and State, personally appeared WARREN K. BRANSCUM, known to me to be the Director, Real Estate Division, whose name is subscribed to the within instrument and acknowledge that he executed the same on behalf of the United States of America in accordance with authority granted to him.

BEVERLY J. FREITAS
My Comm. Expires Feb. 7, [illegible]

Beverly J. Freitas
Notary Public in and for said
County and State

BOARD OF
HARBOR
COMMISSIONERS

RAY A. FLETCHER
President

CECIL L. SCHNELLE
Vice President

BOB H. JENNINGS
Harbor Commissioner & Secretary

LEO J. RAMIREZ
Harbor Commissioner

STANLEY J. DAILY
Harbor Commissioner

PORT MANAGEMENT

ANTHONY J. TAORMINA
Executive Director

port of
hueneme

OXNARD HARBOR DISTRICT P.O. BOX 608 105 E. PORT HUENEME ROAD PORT HUENEME, CA 93041-0608 (805) 488-3677

August 15, 1985

Colonel Dennis F. Butler
U.S. Army Corps of Engineers
Post Office Box 2711
Los Angeles, CA 90053-2325

Dear Colonel Butler:

The Oxnard Harbor District and their prospective tenants are excited about the prospect of expanding the port, in whatever capacity that is recommended by the Corps design documents. The 20 foot depth indicated in the draft report would greatly improve the congestion problem with the oil supply vessels, freeing valuable wharf space for cargo transfer to deep draft vessels. We wholeheartedly support the project and are anxious to begin construction.

After reviewing the program and needs for the harbor, we have concluded that construction for the harbor expansion project must coincide with planned construction by the port district beginning in early 1986. We have begun the procurement of over $15 million in bonds this year to support the project. Consultants are preparing the necessary design and evironmental documents to be completed in time for 1985 construction. Delays in this time frame will detrimentally affect negotiations with shipping companies and future plans for operations.

Very truly yours,

Anthony J. Taormina
Executive Director

AJT:fp

cc: Alan Alcorn
Attn: SPLED-CW

VENTURA COUNTY'S ONLY DEEP WATER PORT

Mr. **Marioncelli.** Mr. Chairman, members of the committee, I am Ted Marioncelli, Harbor Director, City of Oceanside. The City of Oceanside appreciates your committee's continuing support for the Oceanside Sand By-Pass System and the dredging needed.

In addition, we have an additional request for safety improvements in our harbor. We respectfully request that the Congress direct the U.S. Army Corps of Engineers' Civil Works Division to complete the navigation study in progress for the Oceanside Harbor and appropriate funding in the amount of $110,000 for fiscal year 1987. This study was approved by resolution of the Senate in 1967 and by the House in 1969. Funding for the completion of the study has not been provided since 1982, and work was suspended with the issuance of a project report since June 1983.

At this time, there is still a critical need to protect property and prevent injury and loss of life resulting from design defects in the joint military-civilian harbor that serves as a harbor of refuge halfway between San Diego and Los Angeles. We have 45 commercial boats; the U.S. cutter HOBART—Coast Guard cutter HOBART.

The breakwater improvements cause a severe surge problem in our harbor, causing the surface to break inside the harbor channel entrance. In the last eight years, it has caused 10 deaths, 49 serious injuries, and nearly $1 million in property damage. We have submitted a report as part of our testimony that outlines the request in detail.

We respectfully request your consideration.

[The statement of Mr. Marioncelli and attachments follow:]

OFFSET
CAMERA COPY

CITY OF OCEANSIDE

MAYOR
LARRY M. BAGLEY

DEPUTY MAYOR
DR. JOHN MACDONALD

COUNCIL MEMBERS
WALTER A. GILBERT
TED MARIONCELLI
SAM WILLIAMSON

TESTIMONY TO HOUSE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE

OCEANSIDE SAND BYPASS SYSTEM

The City of Oceanside is grateful for the Committee's continuing support for the Oceanside Sand Bypass System. The Administration has proposed an appropriation of $1,918,000 in FY '87 for operation and monitoring of the bypass system.

The technology developed at Oceanside Harbor has the potential for revolutionizing harbor maintenance procedures and reducing federal dredging costs nationwide.

The City of Oceanside is proud to continue in its partnership with the Federal government in implementing this important project.

Thank you.

LARRY M. BAGLEY
Mayor

CIVIC CENTER • 321 NORTH NEVADA • OCEANSIDE, CA 92054 • TELEPHONE 619-439-7304

1540 HARBOR DRIVE NORTH OCEANSIDE, CALIFORNIA 92054
(619) 722-1418

April 16, 1986

TESTIMONY TO THE HOUSE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE

Oceanside Harbor Maintenance Dredging
Oceanside, California

Honorable Chairman and Subcommittee Members:

The Oceanside Small Craft Harbor District urges your support of funding for maintenance dredging of the Oceanside Harbor entrance. This project is required to alleviate inner-harbor surge generated from shoaling at the harbor entrance and in preparation for the testing/operation of the Oceanside Experimental Sand Bypass System.

Small craft harbors such as ours (45 commercial vessels and 874 recreational boating vessels) rely heavily upon Federal support for maintenance dredging. Without this support, many of the harbors of refuge which cannot support their dredging requirements, such as Oceanside, would be jeopardized.

I urge your support for continued Federal funding of maintenance dredging projects for small craft harbors and harbors of refuge.

Larry M. Bagley
President, Board of Directors

1540 HARBOR DRIVE NORTH OCEANSIDE, CALIFORNIA 92054
(619) 722-1418

April 14, 1986

Chairman and Members
United States Senate
House of Representatives
Committee on Appropriations
Energy and Water Development
Subcommittee

Dear Chairman and Members:

The Oceanside Harbor District, City of Oceanside, California respectfully requests that the United States Congress direct the Army Corps of Engineers, Civil Works Division, to complete the Navigation Study in progress for this harbor, and to appropriate funding in the amount of $110,000 for Fiscal Year 1987.

This study was approved by resolution of the Senate in 1967 and by the House in 1969, revised in 1970. However, funding for completion of the study has not been provided since 1982 and work was suspended with the issuance of a Progress Report by the Los Angeles District, Corps of Engineers, in June 1983.

Resumption and completion of the feasibility study is supported by the California Marine Affairs and Navigation Conference (C-MANC) on the basis of testimony that there is a critical need to protect property and prevent injury and loss of life resulting from design defects in this joint military/civilian harbor that serves as a harbor of refuge halfway between Los Angeles and the Port of San Diego. This is a facility that provides dockage for 45 commercial boats, the U.S. Coastguard Cutter Pt. Hobart, some 800 recreational craft and shares a harbor entrance with the adjacent Del Mar Boat Basin at the United States Marine Corps Base, Camp Pendleton .

A severe storm wave and surge problem within the harbor breakwater, caused by inadequate design of both military and civilian works, has resulted in 134 boating accidents within the harbor entrance, 49 serious injuries and 10 deaths, in additional to $986,638.00 in estimated damage to vessels. This is in addition to severe and continuous property damage to harbor facilities and vessels docked within the harbor.

Study of alternative designs for breakwater and jetties during the Navigation Study so far indicate that certain modifications will correct the design deficiencies of the civil and military facilities and will be cost effective in protecting against future damage, injury and loss of life.

We understand that requests for federal funding for recreational harbors have received a low priority by both Congress and the Administration due to increasing federal deficits during the past several years. Therefore, we are requesting that the Corps of Engineers narrow the Scope of Work during the completion of this feasibility study to include only the proposed design modifications and environmental evaluations for the purpose of protecting life and property, and that other aspects of the study, including the possibility of harbor expansion, be excluded at this time.

This request is submitted on behalf of the Oceanside Harbor District and its governing body, the City Council of the City of Oceanside, sitting as the Harbor District Board of Directors.

Very truly yours,

Lawrence Bagley

Lawrence M. Bagley
President

LMB/mc

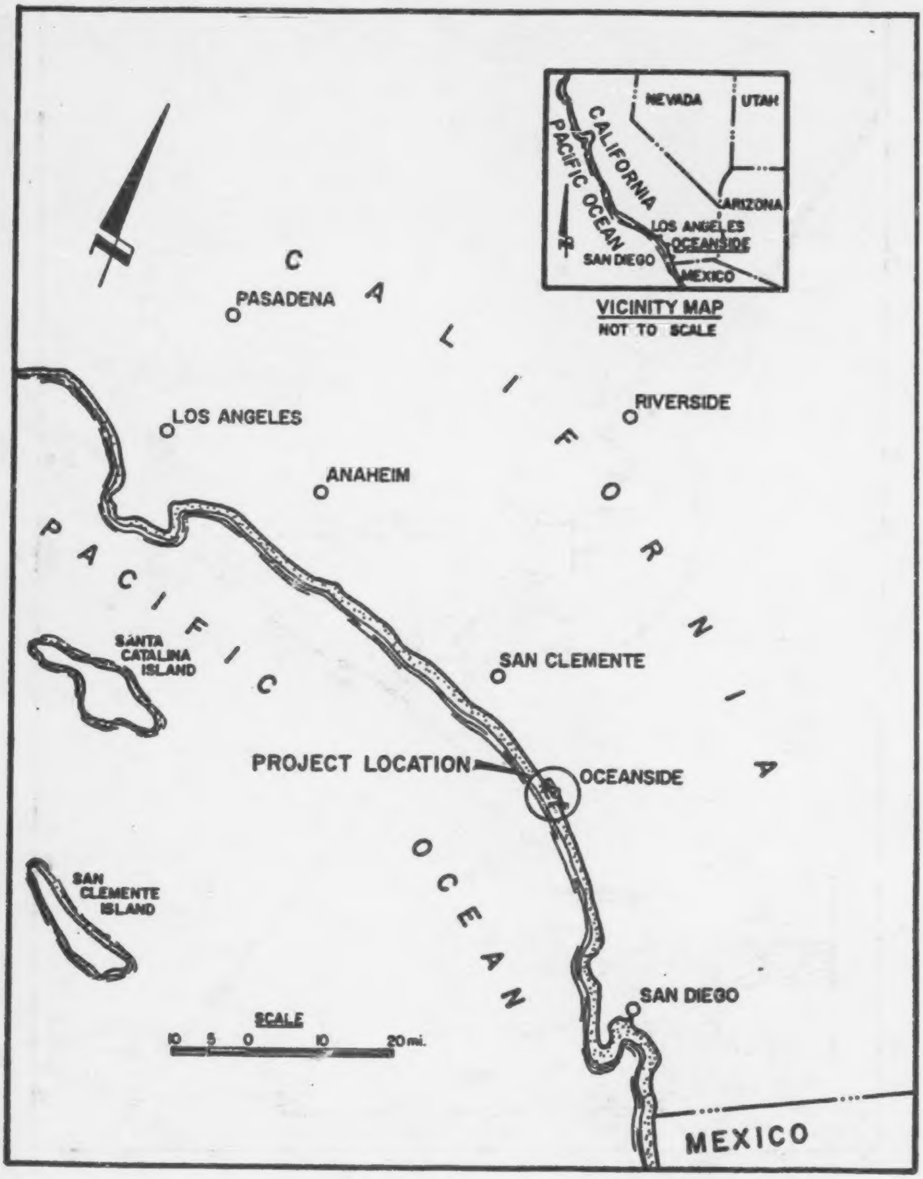
cc: Senator Pete Wilson

Representative Ron Packard

TABLE OF CONTENTS

Chapters		Page
1.0	Request for Appropriation	3
2.0	Project History	4
3.0	Harbor Design Problem	5
4.0	Harbor Design Solutions	8
5.0	Work to be Done	8
6.0	Appendix	10
6.1	Injuries and Deaths Case Histories	10
6.2	Storm Damage Costs	12
6.3	Commercial Vessels	15
6.4	Prior Reports	16

Figures		
1.0	Location Map	1
2.0	Harbor Configuration	2
3.0	Plan Recommendation	7


NEVADA
UTAH
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ARIZONA
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OCEANSIDE
SAN DIEGO
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NOT TO SCALE
C A L I F O R N I A
PASADENA
LOS ANGELES
ANAHEIM
RIVERSIDE
SAN CLEMENTE
PACIFIC OCEAN
SANTA CATALINA ISLAND
SAN CLEMENTE ISLAND
PROJECT LOCATION
OCEANSIDE
SAN DIEGO
MEXICO
SCALE
10 5 0 10 20 mi.

Figure 1: Oceanside Harbor, California, Location Map

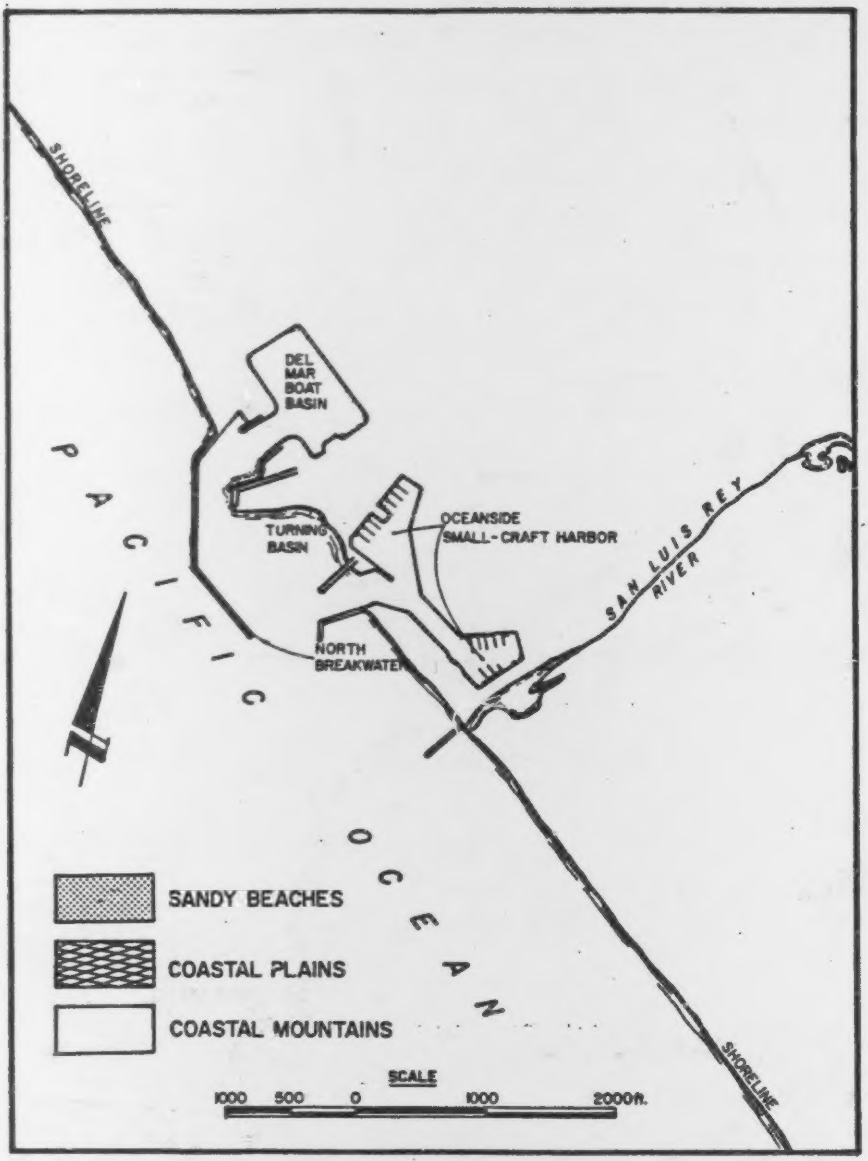

SHORELINE
DEL MAR BOAT BASIN
PACIFIC OCEAN
TURNING BASIN
OCEANSIDE SMALL-CRAFT HARBOR
SAN LUIS REY RIVER
NORTH BREAKWATER
SANDY BEACHES
COASTAL PLAINS
COASTAL MOUNTAINS
SCALE
1000 500 0 1000 2000ft.
SHORELINE

Figure 2 Oceanside Harbor, Existing Configuration

1.0 SYNOPSIS

1.1 Congress is asked to direct the U.S. Army Corps of Engineers to resume and complete a Navigation Project feasibility study for certain breakwater and jetty works at the Del Mar Boat Basin/Oceanside Harbor, Camp Pendleton/Oceanside, California. These works would be designed to correct a critical storm wave and surge problem, compounded by shoaling at the mouth of the harbor, that has caused the loss of 10 lives and 46 serious injuries in 134 boating accidents within the harbor breakwater, as well as millions of dollars in property damage since the harbor was completed in 1963. A federal appropriation of $110,000 for FY87 would be required to complete the study.

1.2 Oceanside Harbor is a relatively small harbor of refuge located 80 miles downcoast of Los Angeles, midway to the Port of San Diego. It shares a common breakwater and navigation entrance with the Del Mar Boat Basin, a facility that serves landing craft and other vessels of the United States Marine Corps, Camp Pendleton. That is to the north and adjacent to the civilian harbor. In addition to some 800 recreational craft, the Oceanside Harbor provides dockage to about 45 commercial fishing and sports fishing boats and the United States Coast Guard Cutter Point Hobart.

1.3 It is the contention of the Oceanside Habor District and the City of Oceanside at this time that the Navigation Project feasibility study, undertaken by the Corps of Engineers as a result of Congressional authorization in 1969, ought to be completed so that necessary modifications to the military breakwater and the related civilian harbor jetties can be made to correct the dangerous condition of the entrance to the joint military/civilian harbor.

1.4 Present configuration of these facilities allows southwesterly ocean swells and storm waves to surge unbroken into the harbor entrance, at times creating extremely hazardous breakers in the mouth of the harbor, as well as damage to harbor piers, vessels docked in the harbor and other facilities. It is estimated that cost of the breakwater and jetty modifications would be about $5 million and that benefits in damage savings would far exceed that amount over the life of the project. Estimated cost to vessels in boating accidents since 1963 is $986,638. Costs for repair and replacement of harbor docks and facilities from storm and surge damage is $1.8 million. There is no way to estimate the costs in terms of loss of life and injuries.

2.0 PROJECT HISTORY

2.1 Numerous studies by both the City of Oceanside and the LosAngeles District, Corps of Engineers, have been undertaken since the Department of the Navy constructed the Del Mar Boat Basin, along with accompanying breakwater and jetties, as a military installation in 1942, adjacent to the City of Oceanside. These studies were done initially in response to environmental and economic impacts caused by the military installation, but have included the implementation of recommendations for a civilian small craft harbor to help justify cost/benefit criteria.

2.2 By 1944 it had become clear that the north to south littoral drift that predominates along the coastline at this point created shoals in the military basin entrance channel, and that the military breakwater and jetties resulted in downcoast erosion of the Oceanside Beach. An initial study by the City in 1949 recommended that a small craft harbor be constructed and that its attendant jetties and groins be employed as a means of stabilizing downcoast beaches.

2.3 In 1958, the Los Angeles District, Corps of Engineers, issued an interim report confirming that the construction of a civilian harbor adjacent to the Del Mar Boat Basin at Camp Pendleton would benefit downcoast beaches and would not adversely impact on military uses. In 1963, the Corps of Engineers issued a survey report that the civilian small craft harbor conformed to Corps standards and would have been justified as a federal project. Federal maintenance was recommended.

2.4 The City of Oceanside in 1962 and 1963 created an inland recreational harbor and dredged a harbor entrance channel to the south of the military harbor and jetty. This allowed 3.8 million cubic yards of material to be dredged and placed on the downcoast beach in an attempt to restore it to pre-1942 configuration. The attempt by the civilian jurisdiction to assist in rectifying adverse impacts created by the adjacent military installation, however, was of limited success. By 1968, the dredged material was again lost to erosion.

2.5 In 1967 and 1969, the Congress authorized additional studies by the Corps of Engineers to attempt to solve the downcoast erosion and accompanying shoaling at the mouth of the joint military/civilian harbor. Several studies have been undertaken in response. Studies have focused on beach stabilization south of the existing harbor and on methods for transporting sand around the harbor entrance in order to reduce the shoaling in the harbor, as well as the potential for expanding the recreational harbor facilities as a result of certain jetty and breakwater modifications. A "Progress Report on Navigation Study" was issued by the Los Angeles District, Corps of Engineers, in June 1983, compiling work done to that date.

2.6 Under Administration policy, placing recreational harbors at a negative priority for federal funding of Corps of Engineers civil works, the last Congressional appropriation for the Oceanside Harbor Navigation Study was made in 1982. About $680,000 had been spent on the study to that date, when it was estimated another $110,000 would be required to complete the study and to prepare the necessary Environmental Impact Statement on recommended modifications to the existing breakwater and jetties.

2.7 In the meantime, work has begun by the Corps of Engineers, under Congressional authorization of an Operation Maintenance Project entitled, "Oceanside Experimental Sand Bypass System." An appropriation of $1.9 million was made in fiscal 1986 for this purpose, and work is in progress. This project calls for installation of a continuously operating system of jet pumps and fluidizers to intercept sediment entering the harbor and to pump it via submerged pipes for constant nourishment to downcoast beaches, in accordance with a report and recommendation by the Los Angeles District in 1982.

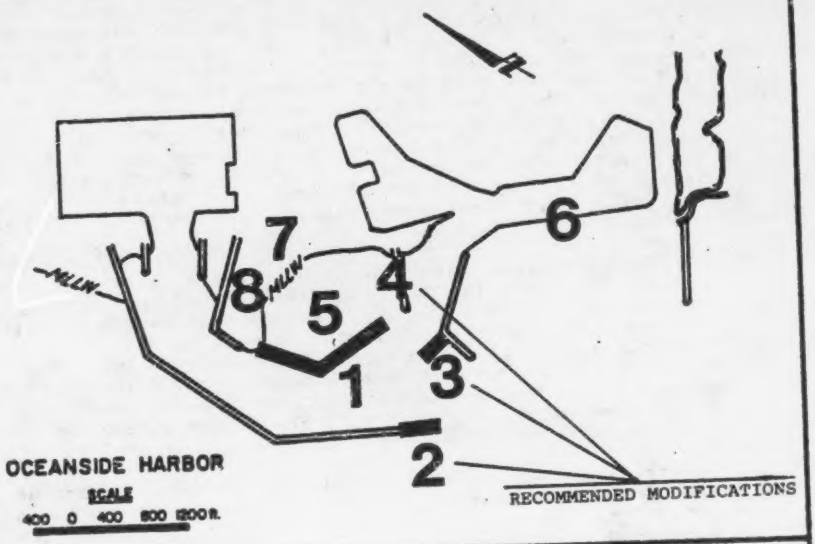
3.0 HARBOR DESIGN PROBLEM

3.1 Studies by military and civilian jurisdictions to determine if harbor facilities should be modified have focused on mitigating environmental and economic loss resulting from the original design flaws of the breakwater and jetties for the military Del Mar Boat Basin. Construction of the civilian harbor itself was justified partly by the perceived need for dredged material to correct downcoast beach erosion.

3.2 Planning studies authorized by Congress in 1967 and 1969, however, included potential expansion of the recreational harbor as a means of providing a beneficial cost ratio in support of modification of the breakwater and jetties, as well as to meet a growing public demand for recreational boating facilities. The potential of expanding the civilian harbor within the existing breakwater was made possible when the U.S. Marine Corps, which has jurisdiction over the harbor's turning basin area, declared that this area would not be needed for military operations and could be used for civilian harbor expansion. The studies established that Oceanside Harbor needed to be expanded in order to become self-supporting, and that there was substantial demand for expanded facilities. However, the Oceanside Harbor District is not seeking expansion of its facilities at this time.

3.3 Shoaling of the entrance channel and related wave surge problems also were well documented in the planning studies. The downshore littoral drift generally carries silt and sand from north to south. However, in certain seasons the reverse is true. It is estimated that some 200,000 cubic yards of material per year is trapped in the harbor entrance, with much higher quantities moving north or south, depending on the season. Periodic maintenance dredging is required and its costs are shared by the Department of the Navy and the Corps of Engineers. The FY 87 President's Budget appropriated $480,000 to the Corps for this purpose. Depths in the harbor entrance change radically in response to changes in sediment transport, fluctuating as much as 5 feet in a single day, causing navigation problems and creating areas too shallow for sailboats with fixed keels and for the larger commercial boats.

3.4 Ocean wave action at this location is dominated by northern hemisphere swells from late fall to spring and by southern hemisphere swells during other periods. Waves generally approach the shore from the southwest during both wave seasons. The harbor entrance is sheltered from waves by features of the coastline and by offshore islands which block deepwater waves from the north and northwest, but is not sheltered from waves out of the south or southwest. Waves of from 6 to 10 feet are not uncommon in the area, and the harbor has an excessive surge problem during periods of heavy surf. When this problem occurs, the entrance, which is open to the southwest, becomes hazardous and boat slips in the harbor can be damaged. Surge may reach a height of 6 to 8 feet within the harbor entrance during winter storms. Shoaling in the harbor entrance complicates this situation by causing breakers to form as the waves cross areas of shallow water. Even experienced sailors and commercial boatmen have been swamped or overturned within the harbor breakwater under this circumstance, resulting in injury and loss of life as their craft are smashed against the jetty.


7
MLLW
MLLW
8
5
4
6
1
3
2
OCEANSIDE HARBOR
SCALE
400 0 400 800 1200 ft.
RECOMMENDED MODIFICATIONS

CANDIDATE PLAN NINE:

PLAN COMBINING BENEFICIAL FEATURES OF OTHER PLANS

1. Inner breakwater, 2,100 feet long
2. North Breakwater extension, 300 feet long (Recommended)
3. Stub groin, 250 feet long (Recommended)
4. Remove entire North Groin (Recommended)
5. 650 new slips, 40 moorings
6. 100 new slips in existing harbor
7. 144 dry storage spaces
8. 750 parking spaces

Figure 3 Candidate Plan Nine

4.0 HARBOR DESIGN SOLUTIONS

4.1 Alternative design solutions to the problems surrounding the Oceanside Harbor have been under study in a multi-stage process over a number of years. Among the many options considered, nine candidate plans were summarized in the 1983 Navigation Study Progress Report. Evaluations were based in part on preliminary results of Waterways Experiment Station model tests of various breakwater and jetty modifications on their ability to reduce shoaling and surge and storm wave damage. The review process also included economic feasibility and review by local interests at a public meeting.

4.2 Of the nine plans reviewed, the last (#9) appears to merit serious consideration for its potential of mitigating the safety hazards and damage problems that result from surge and storm wave action within the harbor breakwater. Its configuration also provides a base for the potential expansion of the harbor at some date in the future, although the Oceanside Harbor District and the City of Oceanside at this time wish to focus entirely on the safety and damage problems that result from existing defective design.

4.3 Key features of plan (#9) include a 300-foot extension of the north breakwater, a 250-foot stub groin on the south jetty, and removal of the entire north groin, which is submerged and constitutes a navigation hazard. A feature which would be omitted from the requested study at this time is the proposed 2,100 foot inner harbor breakwater which would have as its purpose the formation of an inner sheltered basin for the expansion of recreational facilities. One design advantage deleted by this omission will be the desired separation of military and civilian craft within the harbor, however, this objective is not eliminated and can be achieved at a later date, under the modified plan (#9).

5.0 WORK TO BE DONE

5.1 Considerable work and expense have gone into the studies that are summarized in the 1983 Navigation Study Progress Report. The suggested modifications to the breakwater and jetty contained in the modified plan (#9) are urgently needed in order to protect both civil and military interests at the joint use harbor. Loss of life and injury has impacted both civilians and military personnel who use the harbor facilities. It is therefore the contention of the Oceanside Harbor District and the City of Oceanside that the feasibility study should be completed as soon as possible so that necessary design modifications can be made to both military and civilian facilities that constitute the protection of the joint use harbor.

5.2 Work remaining to be completed under the feasibility study phase of this proposed Navigation project is minimal. It includes confirmation and updating of existing studies, additional environmental analysis and a full environmental assessment, and presentation of findings to the public and to appropriate local, state and federal agencies for comment. We believe this work can be accomplished during FY87 within the recommended appropriation of $110,000.

6.0 APPENDIX

6.1 INJURIES AND DEATHS CASE HISTORIES AT OCEANSIDE HARBOR

6.1.1 On November 21, 1983, two young Marines from Camp Pendleton set out on a fishing expedition just after dusk. Cpl. Billie Joe Parrish, 22, had just purchased a 10-foot outboard skiff. His companion Stewart D. Poulsen, told officers that they went fishing off Camp Del Mar bouy #3 inside the harbor breakwater. The fish were biting but they had run out of bait and motored across the harbor to the Cape Cod area on the south of the harbor and purchased more bait. On their return toward the entrance of the harbor, their boat was hit by waves and swamped. Both men tried to swim for the nearby rock jetty of the outer breakwater. Poulsen made it and crawled along the breakwater between breaking waves to get help. Parrish never made it to the rocks and drowned. His body was recovered two weeks later.

6.1.2 On Sunday, February 13, 1983 at about 3:30 a.m., the 42-foot commercial fishing boat, The City of Oceanside, began its regular run for live bait. It had a crew of four experienced boatmen. Chester Dolan was at the helm. There was a small craft warning posted. Waves were breaking around six feet and not considered dangerous for this size boat. The City of Oceanside was valued at $75,000 and had about $15,000 worth of gear and nets on board. As Skipper Dolan turned the vessel north at the harbor mouth, they encountered a heavy set of waves. The concerned crew included Howard Schultz, 51, David Dreyer and Fred Hatfield. Crewman Schultz noticed that the large fishing net at the aft of the vessel was in danger of being washed overboard by the waves. Schultz went to secure the net. He was hit by a large wave and both he and the net were washed overboard. The other crewmen, in a desperate struggle with the elements and net, finally rescued Schultz who was entangled in the net. They pulled him into the boat but the net fouled the engine propeller, killing the power. The boat was helpless against the pounding surf. Within a few minutes, the boat was pounded into the south jetty. It was breaking up fast. The crew members, Skipper Dolan, Hatfield and Dreyer, decided to abandon ship and successfully jumped to the jetty rocks. Schultz, however, yelled that he couldn't make it, apparently weakened by his ordeal of being swept overboard earlier. A few seconds later, the boat was pounded to pieces by the heavy surf and Schultz was killed. His body was recovered a short time later by emergency personnel from a nearby Coast Guard Station.

6.1.3 An experienced sailboat racing crew lost one of its members in a similar accident in the harbor entrance November 30, 1985. At about 3 p.m., the 30-foot sailboat, "Pudmuckle" was returning from a day of racing in outer waters. The crew included the Skipper Larry Long, crewmembers Frank Luchsinger, Ann Marie Smith, Doug Ross, George Spitzenfeil and R. Daniel Kuntz. (Kuntz had been washed overboard in 1983 two hours after the fishing boat accident that killed Schultz. Kuntz was rescued and the crew saved the ship in that incident. But in the "Pudmuckle" case, the story ended tragically.)

As the sailboat entered the harbor entrance, heavy surf hit the vessel stern. One wave knocked Skipper Long into the water. Kuntz and Miss Smith were at the helm. The vessel broached and came about facing the wind. It was hit by another large wave, and the rudder broke under the pressure. Another wave pounded the boat onto the rocks, bow first. The crew scrambled to the jetty rocks. Miss Smith, Kuntz, Spitzenfeil and Ross were able to jump to safety but Luchsinger got caught in life lines. He suffered severe injuries as the boat was being pounded to pieces on the rocks. He was rescued but died a short time later of severe trauma to the chest. Skipper Long was rescued.

6.2 STORM DAMAGE COSTS

The type of floating dock system installed in Oceanside harbor normally has a life span of from 15 to 20 years. Installation of these new concrete floats with thru-rods has made a great improvement and cost reduction, but until the harbor entrance is correct, Oceanside Harbor will continue to have unnecessary repairs of utilities, wood and roller assemblies, and a rapid failing of floats. The floats on the Transient Dock, installed in 1978, will have to be replaced within 1 to 2 years at a cost of $90,000 (8 to 8 years normal life span). T-Dock floats will require major work in 2 years (4 year normal life span).

All of the hollow spun piles are being replaced on a 5-year plan. Fifteen of the piles have broken off. After pulling, checking and replacing, 40 others have been badly cracked just below the mud line. The Harbor District has had to add more piles to the ends of the fingers and main walk to reinforce lthe system.

Costs for repairing utilities, etc., are for parts only. Labor time is unknown because maintenance crews are continuously nailing dock lumber, hanging pipes, tying boats, tightening cleats and bolts and pumping docks. A rough estimate of time would 30 hours per week, or $30,000 per year.

Additional examples of damage costs due to surge are as follows:

1. **Commercial dock & Sportfishing Dock (1976-1986 - $309,000)**

    a) Replaced in 1976-77 (normal life of 15 to 20 years, should have been good until at least 1991/92 - $123,000.

    b) 1978 through 1982 - expended $40,000 on repairs.

    c) Commercial Dock replaced in 1983 (life span of only 5 years) - $40,000.

    d) 1983 - expended $4,000 on repairs.

    e) Sportfishing Dock replaced in 1984/85 (life span of only 7 years) - $100,000.

    f) 1985 through 1986 - expended $2,000 on repairs.

2. **Transit Dock (1978-1986 - $140,000)**

   a) Transient Dock slip 16-24 were replaced in 1978 at a cost of $40,000.

   b) Transient Dock slip 16-24 were replaced in 1980/81 at a cost of $80,000 (life span of 2 years).

   c) Repair of utilities, wood gusset, roller assembly 1978 through 1986 - $20,000.

3. **Y-Dock (1978-1986 - $127,000) - Lost Revenue $445,500**

   a) Y-Dock original length - 1,200 feet.

   b) 300 feet replaced in 1978-80 at a cost of $60,000.

   c) 300 feet replaced in 1985 at a cost of $40,000.

   d) 600 feet have not been replaced due to surge and swell.

   e) Repair to utilities estimated at $27,000.

   f) Lost revenue - $49,500 per year due to the 600 feet of dock not replaced.

4. **Coast Guard Dock (1973-1986 - $186,800)**

   a) Coast Guard Dock installed in 1973 at a cost of $139,000.

   b) Replaced in 1981 at a cost of $40,000 (7 year life span).

   c) Cost of repairs to utilities - $7,800.

5. **Launch Ramp Dock (1982-1986 - $83,200)**

   a) Launch ramp and tie-up dock replaced in 1982/83 at a cost of $82,000.
   b) Repair of wood and roller assembly - $1,200.

6. **J-Dock (1984-1986 - $519,638)**

   a) J-Dock replaced in 1984 at a cost of $519,638.

   b) Repair of utilities, roller wood - $2,000.

7. **R through T Docks (1984-1986 - $1,671,793)**

    a) R through T Docks have been replaced from 1984-86 at a cost of $1,667,793.

    b) Repair of utilities - $4,000.

8. **A through I Docks (1978-1986 - $225,000)**

    a) Annual budget for repair of docks A through I, the old docks left in the Harbor, has been $20,000 to $30,000 per year, dropping as new docks are installed.

9. **Rip Rap Replacement (1982-1987 - $160,000)**

    a) Repair of riprap has been $20,000 per year for past 4 years, with $80,000 budgeted in 1986/87 for major work in launching ramp area.

Repair & Replacement:

Totals 1978 to 1986	=	$1,441,431
Lost Revenue	=	445,500

TOTAL COSTS	=	**$1,886,931**
		===========

6.3

COMMERCIAL VESSELS

The following commercial vessels are berthed in Oceanside Harbor:

Owner/Business Name	Boat Name	Length	Type of Commercial Activity
R. Dunn	Espada	42'	Fishing
J. Donnelly	Querida	47'	Fishing
F. Fahl	Fishin'n Fever	29'	Fishing
D. Piro		24'	Fishing
D. Calloway	MaryAnn	30'	Fishing
J. Guth	Ruthie	37'	Fishing
G. Lauro	Maria Madre	36'	Fishing
B. Breakfield	Convincer III	32'	Fishing
D. McWha	Wharf Rat	25'	Fishing
C. Connor	Sweet C	27'	Fishing
M. Malley	Cardiff Rose	40'	Fishing
R. Grant	Big Eye	22'	Fishing
N. Eaton	Pacific Sun	30'	Fishing
P. Sertic	LoAn	43'	Fishing
R. Miller		20'	Fishing
T. Ptak	Donna H.	22'	Fishing
P. Ghio	San Clemente	25'	Fishing
J. Bowen	Lisa Jane	20'	Fishing
T. Pendleton	Lois B.	25'	Fishing
D. Parnell	Average White Boy	17'	Fishing
D. Whitehill		20'	Fishing
J. Masterson	Stango	27'	Fishing
E. Nowell	Morning Star	32'	Fishing
J. Jones	Trojan	40'	Live Bait Fishing
Helgren's Sportfishing	Electra	68'	Sportfishing Charters
Helgren's Sportfishing	Sea Trek	50'	Sportfishing Charters
Helgren's Sportfishing	Oceanside 95	95'	Sportfishing Charters
Helgren's Sportfishing	Tortuga	45'	Sportfishing Charters
Helgren's Sportfishing	(Subleased Space)	45'	Sportfishing Charters
R. Stanley	Pussycat	27'	Charter Fishing Trips
Marine Review Comm.	San Diego State Univ.	20'	Research
Cal. Marine Review	Metermaid	24'	Research
Eco Systems	Osprey	30'	Research
D. Carlson	Fisherette	40'	Research
Hydra Marine	Andromeda	30'	Salvage
Hydra Marine		14'	Salvage
D. Miller	Cobra I	37'	Diving & Salvage
D. Miller	Cobra II	23'	Diving & Salvage
Oceanworks	Diver	36'	Oil pipe hookups for power plants
Oceanworks	Ranger	43'	
U.S. Coast Guard	Cutter Point Hobart	82'	Open Water Patrolling

The following trailered commercial vessels are launched at Oceanside Harbor:

Owner/Business Name	Boat Name	Length	Type of Commercial Activity
Eco M	Eco M	21'	Research
U.C. Santa Barbara	Sea Fig	23'	Research
Marine Eco Consult.	Better Benthos	23'	Research
West Teck	Pelican	23'	Research

TOTAL: 45 Commercial Vessels

6.4

PRIOR REPORTS AND EXISTING PROJECTS IN THE OCEANSIDE HARBOR AREA

Since the harbor was first built in 1942, there have been numerous evaluations of harbor expansion and of the shoaling problem and associated downcoast beach erosion. While harbor capacity has increased as a result of implementing recommendations of these studies, the downcoast beaches have not been stabilized. Study findings and recommendations are shown on table 1.

Table 1: Prior Reports, Oceanside Harbor

REPORT	FINDINGS AND RECOMMENDATIONS
REPORT ON A PROGRAM FOR INSTALLING, MONITORING, AND EVALUATING THE EFFECTIVENESS OF A SAND BYPASS SYSTEM AS A MEANS OF MAINTENANCE OF THE HARBOR CHANNELS, OCEANSIDE HARBOR, OCEANSIDE, CA. March 1982. LA District Corps of Engineers	Shoaling in the harbor is a result of drift from both north and south. A continuously operating system of jet pumps and fluidizers may intercept sediment entering the harbor and will provide constant nourishment for downcoast beaches. Such a sand bypass system will not completely solve the erosion of downcoast beaches, as the sediment input to the area from local streams has diminished in the past 40 years. Installation of the system was recommended and is proceeding.
SURVEY REPORT FOR BEACH EROSION CONTROL, SAN DIEGO COUNTY, VICINITY OF OCEANSIDE. CALIFORNIA. Sept. 1980. LA District Corps of Engineers	Beach erosion control is necessary to prevent serious damages to public and private property along Oceanside Beach. Recommendation calls for a 10,800-foot long offshore breakwater with 4 groins constructed perpendicular to the beach for further stabilization and as transition structures to downcoast areas.

Table 1 -- continued

REPORT	FINDINGS AND RECOMMENDATIONS
OCEANSIDE HARBOR AND BEACH, CALIFORNIA: DESIGN OF STRUCTURES FOR HARBOR IMPROVEMENT AND BEACH EROSION CONTROL June 1980 U.S. Army Engineer Waterways Experiment Station	Model studies indicate the best way to increase harbor area and reduce wave surge is creation of inner harbor combined with extension of both the South Jetty and the North Breakwater. Several configurations were shown to be feasible.
SHOALING STUDY, OCEANSIDE SMALL CRAFT HARBOR. 1 Feb 1968 Moffatt and Nichol, Engineers	Shoaling of entrance channels is the result of both downcoast and upcoast drift. South Jetty and South Groin should be extended seaward to reduce recycling of sediment dredged from the harbor and placed on downcoast beaches.
SURVEY REPORT FOR NAVIGATION, OCEANSIDE HARBOR, OCEANSIDE (CAMP PENDLETON), CA June 1963, LA District Corps of Engineers	The small craft harbor designed and built by local interests conformed to Corps standards and would have been justified as a Federal project. Federal maintenance of the harbor was recommended.
DESIGN WAVES FOR PROPOSED SMALL CRAFT HARBOR AT OCEANSIDE, CALIFORNIA March, 1960. Marine Advisors	Based on 1900-1958 storm history, shoreline would best be protected if sheltered from directions of greater than 260° azimuth (from north). Without protection, net littoral drift downcoast would be about 200,000 cubic yards per year.
INTERIM REPORT ON FEASIBILITY OF LOCATING A PROPOSED RECREATIONAL HARBOR ENTRANCE IN THE LEE OF THE THE EXTENDED BREAKWATER AT DEL MAR BOAT BASIN, CAMP PENDLETON, CALIFORNIA. October 1958. LA District Corps of Engineers.	Construction of civilian harbor would benefit downcoast beach, improve alinement of entrance channel, and have no detrimental impact on military use of Del Mar Boat Basin. Report recommended that the the Oceanside Small Craft Harbor be constructed.
REPORT ON SAND ACCRETIONS AT DEL MAR HARBOR, CAMP PENDLETON, CALIFORNIA July 1958. Leeds, Hill, and Jewett, Engineers	Average annual accumulation of sediment in the harbor entrance will be 250,000 cubic yards, requiring biennial dredging of 500,000 cubic yards. Report concluded that the South Jetty construction would reduce upcoast drift into the harbor entrance.

Table 1 -- continued

REPORT	FINDINGS AND RECOMMENDATIONS
SHORE PROTECTION AND SMALL CRAFT HARBOR DEVELOPMENT IN OCEANSIDE-CAMP PENDLETON AREA, CALIFORNIA November 1955. Leeds, Hill, and Jewett, Engineers	The Del Mar Boat Basin should be dredged. Oceanside public beach should be restored. Recommendation was for not less than 900,000 cubic yards to be dredged from the harbor area and placed on downcoast beaches.
INTERIM REPORT ON HARBOR ENTRANCE IMPROVEMENT AT CAMP PENDLETON, CALIFORNIA 25 Mar 1953. LA District, Corps of Engineers	Net downcoast littoral drift probably exceeds upcoast by 100,000 cubic yards per year. From 1950-1952, about 1.5 million cubic yards of sediment accumulated in harbor entrance. Recommendation was that jetties be rebuilt to trap sand for periodic beach nourishment.
REPORT FOR THE CITY OF OCEANSIDE ON EFFECTS OF SHORE EROSION AND ACCRETION TO CAMP PENDLETON BOAT HARBOR October 1949. Leeds, Hill, and Jewett, Engineers	Beaches have been seriously eroded since Camp Pendleton Harbor was constructed. An adequate small-craft harbor is needed in the area. Report recommends a small craft harbor be constructed using the Oceanside site, and that beaches downcoast be stabilized.

OCEANSIDE HARBOR DISTRICT - NAVIGATION STUDY FY87

1540 HARBOR DRIVE NORTH OCEANSIDE, CALIFORNIA 92054
(619) 722-1418

April 14, 1986

Chairman and Members
United States Senate
House of Representatives
Committee on Appropriations
Energy and Water Development
Subcommittee

Dear Chairman and Members:

The Oceanside Harbor District, City of Oceanside, California respectfully requests that the United States Congress direct the Army Corps of Engineers, Civil Works Division, to complete the Navigation Study in progress for this harbor, and to appropriate funding in the amount of $110,000 for Fiscal Year 1987.

This study was approved by resolution of the Senate in 1967 and by the House in 1969, revised in 1970. However, funding for completion of the study has not been provided since 1982 and work was suspended with the issuance of a Progress Report by the Los Angeles District, Corps of Engineers, in June 1983.

Resumption and completion of the feasibility study is supported by the California Marine Affairs and Navigation Conference (C-MANC) on the basis of testimony that there is a critical need to protect property and prevent injury and loss of life resulting from design defects in this joint military/civilian harbor that serves as a harbor of refuge halfway between Los Angeles and the Port of San Diego. This is a facility that provides dockage for 45 commercial boats, the U.S. Coastguard Cutter Pt. Hobart, some 800 recreational craft and shares a harbor entrance with the adjacent Del Mar Boat Basin at the United States Marine Corps Base, Camp Pendleton .

A severe storm wave and surge problem within the harbor breakwater, caused by inadequate design of both military and civilian works, has resulted in 134 boating accidents within the harbor entrance, 49 serious injuries and 10 deaths, in additional to $986,638.00 in estimated damage to vessels. This is in addition to severe and continuous property damage to harbor facilities and vessels docked within the harbor.

Study of alternative designs for breakwater and jetties during the Navigation Study so far indicate that certain modifications will correct the design deficiencies of the civil and military facilities and will be cost effective in protecting against future damage, injury and loss of life.

We understand that requests for federal funding for recreational harbors have received a low priority by both Congress and the Administration due to increasing federal deficits during the past several years. Therefore, we are requesting that the Corps of Engineers narrow the Scope of Work during the completion of this feasibility study to include only the proposed design modifications and environmental evaluations for the purpose of protecting life and property, and that other aspects of the study, including the possibility of harbor expansion, be excluded at this time.

This request is submitted on behalf of the Oceanside Harbor District and its governing body, the City Council of the City of Oceanside, sitting as the Harbor District Board of Directors.

Very truly yours,

Lawrence Bagley

Lawrence M. Bagley
President

LMB/mc

cc: Senator Pete Wilson

Representative Ron Packard

TABLE OF CONTENTS

Chapters		Page
1.0	Request for Appropriation	3
2.0	Project History	4
3.0	Harbor Design Problem	5
4.0	Harbor Design Solutions	8
5.0	Work to be Done	8
6.0	Appendix	10
6.1	Injuries and Deaths Case Histories	10
6.2	Storm Damage Costs	12
6.3	Commercial Vessels	15
6.4	Prior Reports	16

Figures		
1.0	Location Map	1
2.0	Harbor Configuration	2
3.0	Plan Recommendation	7

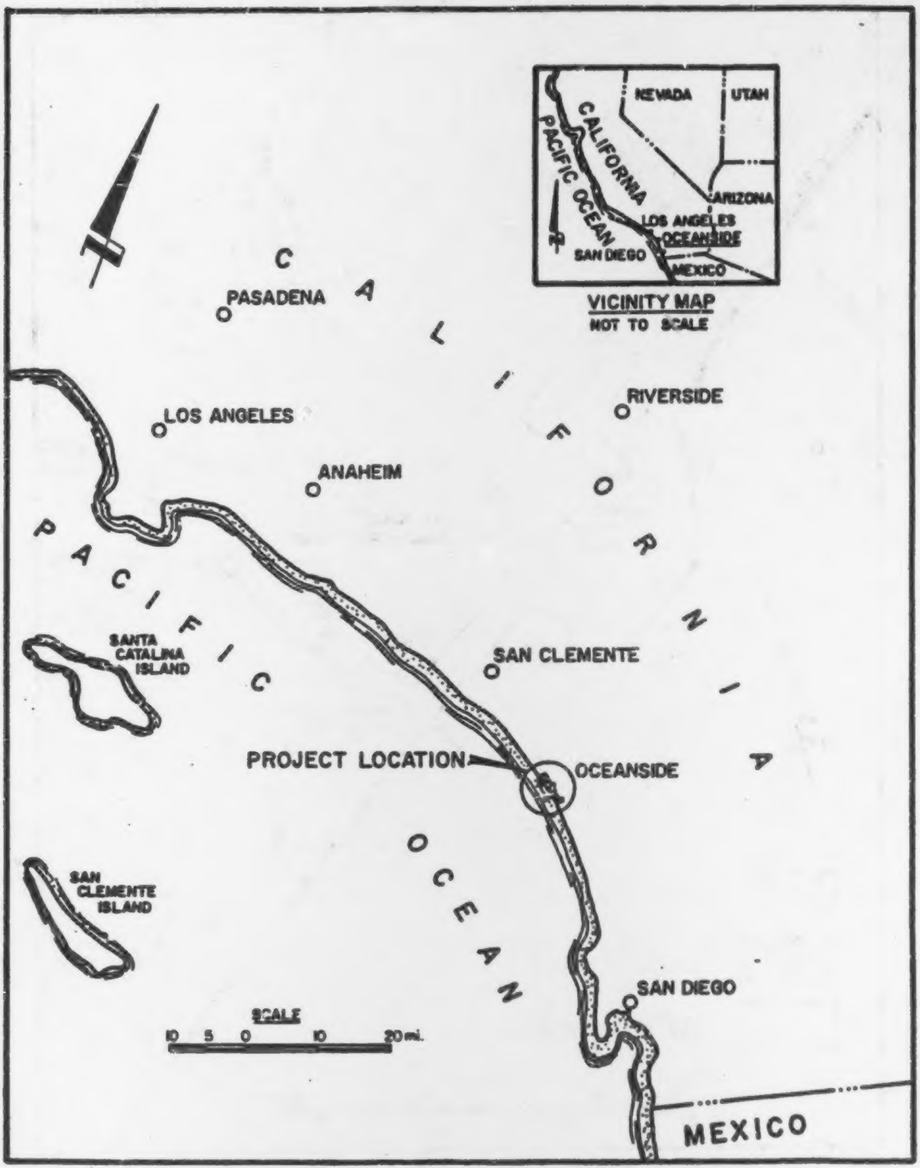

NEVADA
UTAH
CALIFORNIA
PACIFIC OCEAN
ARIZONA
LOS ANGELES
OCEANSIDE
SAN DIEGO
MEXICO
VICINITY MAP
NOT TO SCALE
CALIFORNIA
PASADENA
LOS ANGELES
ANAHEIM
RIVERSIDE
SAN CLEMENTE
OCEANSIDE
PROJECT LOCATION
SAN DIEGO
MEXICO
PACIFIC OCEAN
SANTA CATALINA ISLAND
SAN CLEMENTE ISLAND
SCALE
10 5 0 10 20 mi.

Figure 1: Oceanside Harbor, California, Location Map

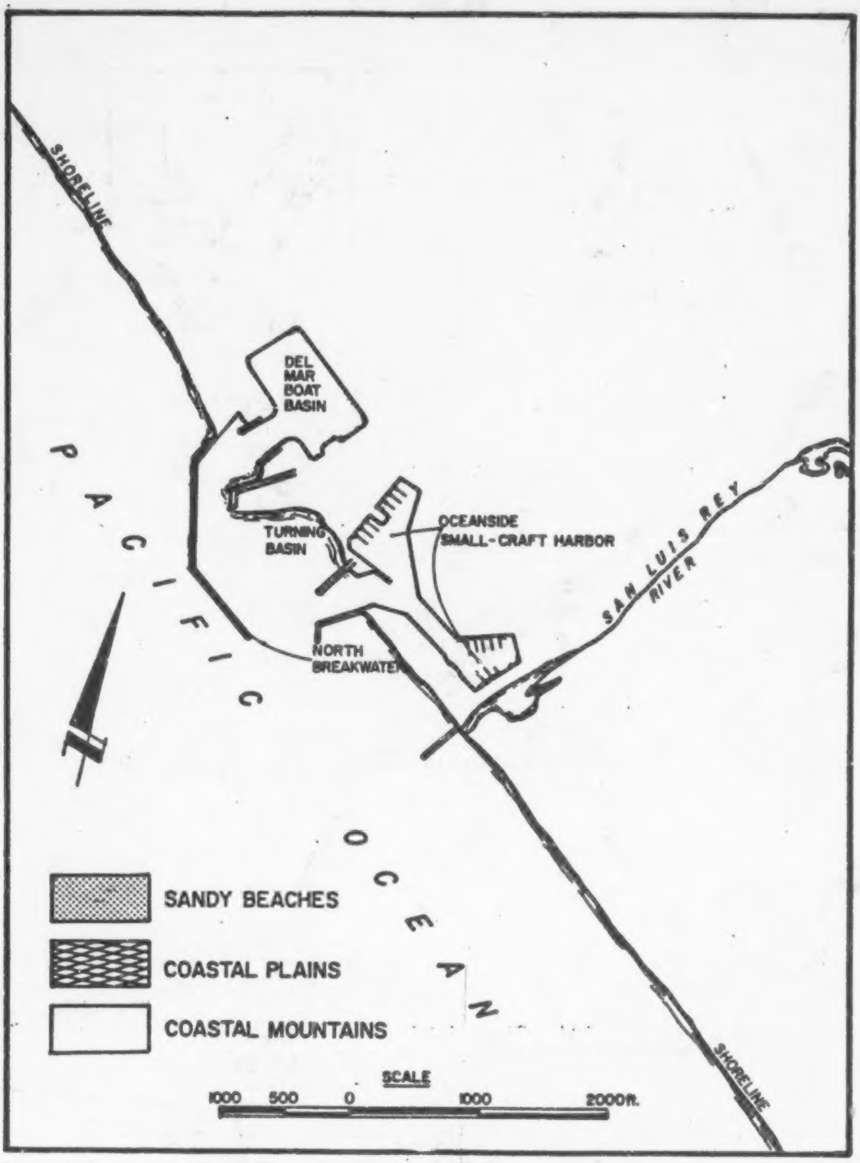

SHORELINE
DEL MAR BOAT BASIN
TURNING BASIN
OCEANSIDE SMALL-CRAFT HARBOR
SAN LUIS REY RIVER
NORTH BREAKWATER
PACIFIC OCEAN
SANDY BEACHES
COASTAL PLAINS
COASTAL MOUNTAINS
SCALE
1000 500 0 1000 2000 ft.
SHORELINE

Figure 2 Oceanside Harbor, Existing Configuration

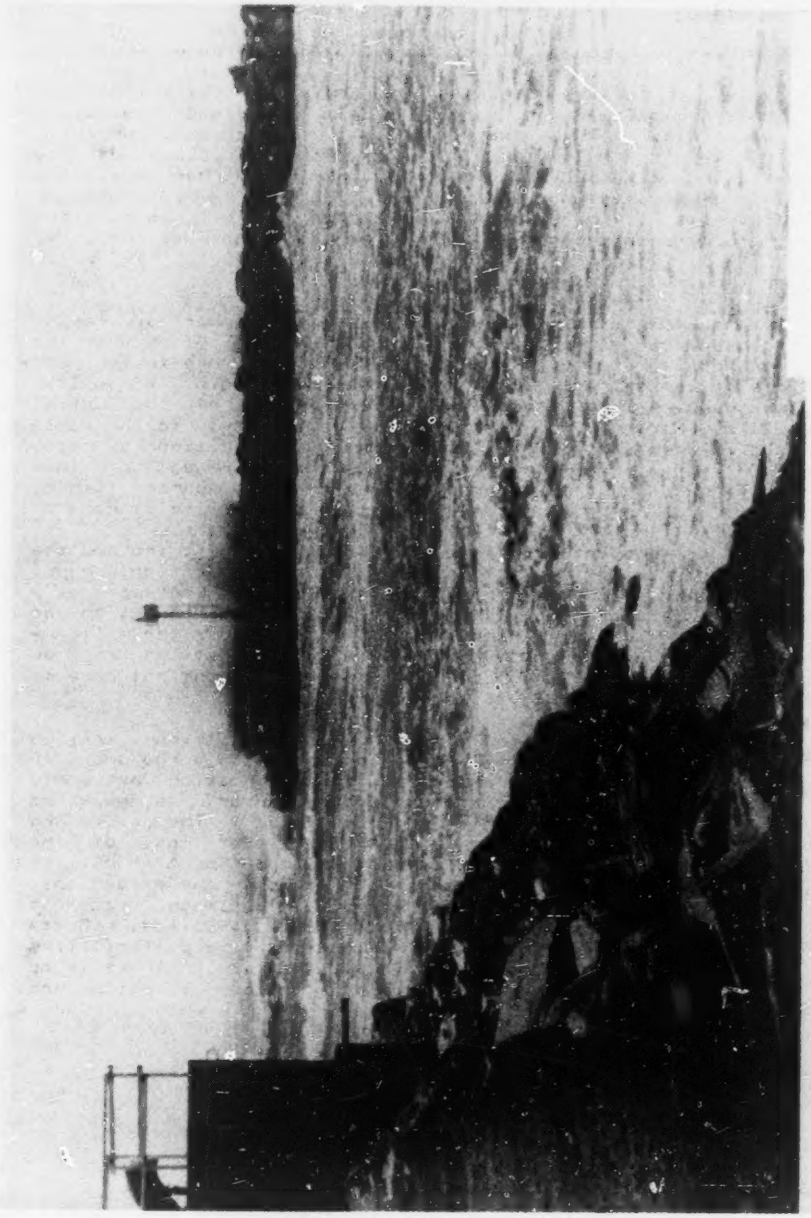
1.0 SYNOPSIS

1.1 Congress is asked to direct the U.S. Army Corps of Engineers to resume and complete a Navigation Project feasibility study for certain breakwater and jetty works at the Del Mar Boat Basin/Oceanside Harbor, Camp Pendleton/Oceanside, California. These works would be designed to correct a critical storm wave and surge problem, compounded by shoaling at the mouth of the harbor, that has caused the loss of 10 lives and 46 serious injuries in 134 boating accidents within the harbor breakwater, as well as millions of dollars in property damage since the harbor was completed in 1963. A federal appropriation of $110,000 for FY87 would be required to complete the study.

1.2 Oceanside Harbor is a relatively small harbor of refuge located 80 miles downcoast of Los Angeles, midway to the Port of San Diego. It shares a common breakwater and navigation entrance with the Del Mar Boat Basin, a facility that serves landing craft and other vessels of the United States Marine Corps, Camp Pendleton. That is to the north and adjacent to the civilian harbor. In addition to some 800 recreational craft, the Oceanside Harbor provides dockage to about 45 commercial fishing and sports fishing boats and the United States Coast Guard Cutter Point Hobart.

1.3 It is the contention of the Oceanside Habor District and the City of Oceanside at this time that the Navigation Project feasibility study, undertaken by the Corps of Engineers as a result of Congressional authorization in 1969, ought to be completed so that necessary modifications to the military breakwater and the related civilian harbor jetties can be made to correct the dangerous condition of the entrance to the joint military/civilian harbor.

1.4 Present configuration of these facilities allows southwesterly ocean swells and storm waves to surge unbroken into the harbor entrance, at times creating extremely hazardous breakers in the mouth of the harbor, as well as damage to harbor piers, vessels docked in the harbor and other facilities. It is estimated that cost of the breakwater and jetty modifications would be about $5 million and that benefits in damage savings would far exceed that amount over the life of the project. Estimated cost to vessels in boating accidents since 1963 is $986,638. Costs for repair and replacement of harbor docks and facilities from storm and surge damage is $1.8 million. There is no way to estimate the costs in terms of loss of life and injuries.



OCEANSIDE HARBOR ENTRANCE
Taken From South Jetty
Looking Toward North Jetty
Moderate Seas

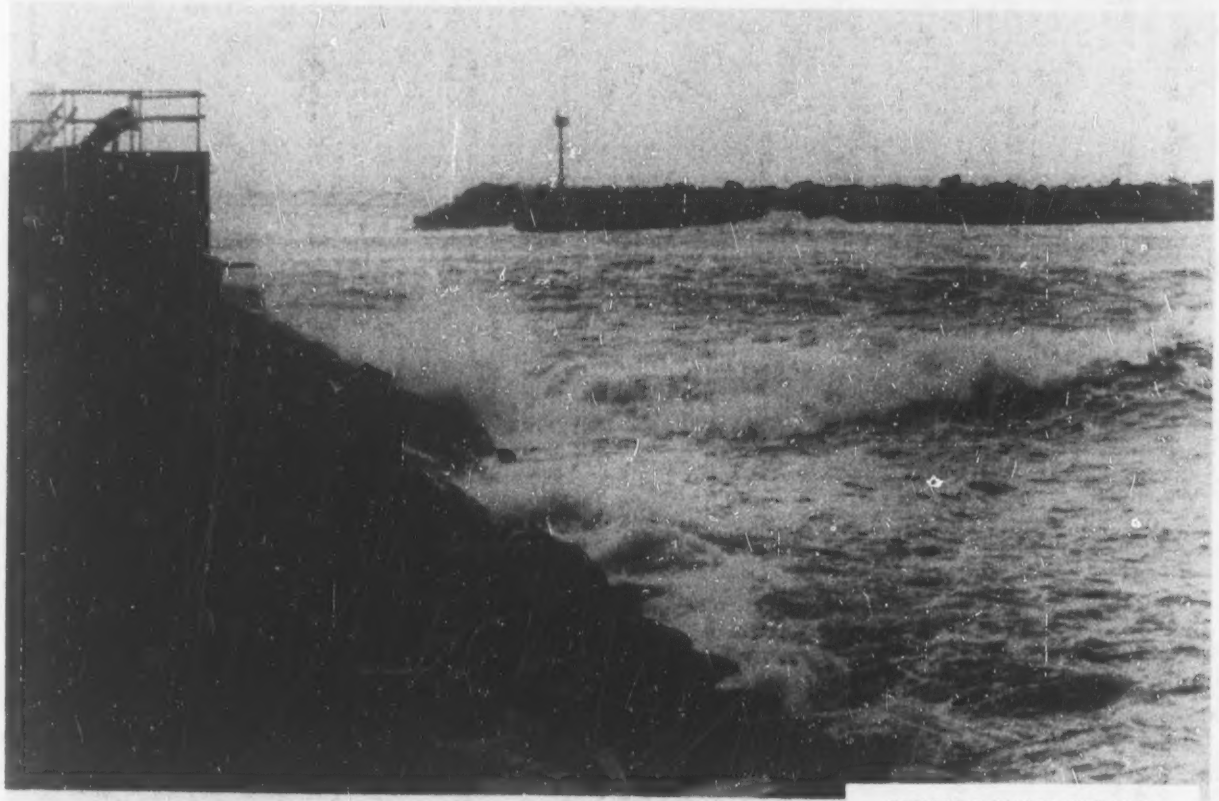
2.0 PROJECT HISTORY

2.1 Numerous studies by both the City of Oceanside and the LosAngeles District, Corps of Engineers, have been undertaken since the Department of the Navy constructed the Del Mar Boat Basin, along with accompanying breakwater and jetties, as a military installation in 1942, adjacent to the City of Oceanside. These studies were done initially in response to environmental and economic impacts caused by the military installation, but have included the implementation of recommendations for a civilian small craft harbor to help justify cost/benefit criteria.

2.2 By 1944 it had become clear that the north to south littoral drift that predominates along the coastline at this point created shoals in the military basin entrance channel, and that the military breakwater and jetties resulted in downcoast erosion of the Oceanside Beach. An initial study by the City in 1949 recommended that a small craft harbor be constructed and that its attendant jetties and groins be employed as a means of stabilizing downcoast beaches.

2.3 In 1958, the Los Angeles District, Corps of Engineers, issued an interim report confirming that the construction of a civilian harbor adjacent to the Del Mar Boat Basin at Camp Pendleton would benefit downcoast beaches and would not adversely impact on military uses. In 1963, the Corps of Engineers issued a survey report that the civilian small craft harbor conformed to Corps standards and would have been justified as a federal project. Federal maintenance was recommended.

2.4 The City of Oceanside in 1962 and 1963 created an inland recreational harbor and dredged a harbor entrance channel to the south of the military harbor and jetty. This allowed 3.8 million cubic yards of material to be dredged and placed on the downcoast beach in an attempt to restore it to pre-1942 configuration. The attempt by the civilian jurisdiction to assist in rectifying adverse impacts created by the adjacent military installation, however, was of limited success. By 1968, the dredged material was again lost to erosion.



OCEANSIDE HARBOR ENTRANCE
Taken From South Jetty
Looking Toward North Jetty
Moderate Seas

2.5 In 1967 and 1969, the Congress authorized additional studies by the Corps of Engineers to attempt to solve the downcoast erosion and accompanying shoaling at the mouth of the joint military/civilian harbor. Several studies have been undertaken in response. Studies have focused on beach stabilization south of the existing harbor and on methods for transporting sand around the harbor entrance in order to reduce the shoaling in the harbor, as well as the potential for expanding the recreational harbor facilities as a result of certain jetty and breakwater modifications. A "Progress Report on Navigation Study" was issued by the Los Angeles District, Corps of Engineers, in June 1983, compiling work done to that date.

2.6 Under Administration policy, placing recreational harbors at a negative priority for federal funding of Corps of Engineers civil works, the last Congressional appropriation for the Oceanside Harbor Navigation Study was made in 1982. About $680,000 had been spent on the study to that date, when it was estimated another $110,000 would be required to complete the study and to prepare the necessary Environmental Impact Statement on recommended modifications to the existing breakwater and jetties.

2.7 In the meantime, work has begun by the Corps of Engineers, under Congressional authorization of an Operation Maintenance Project entitled, "Oceanside Experimental Sand Bypass System." An appropriation of $1.9 million was made in fiscal 1986 for this purpose, and work is in progress. This project calls for installation of a continuously operating system of jet pumps and fluidizers to intercept sediment entering the harbor and to pump it via submerged pipes for constant nourishment to downcoast beaches, in accordance with a report and recommendation by the Los Angeles District in 1982.

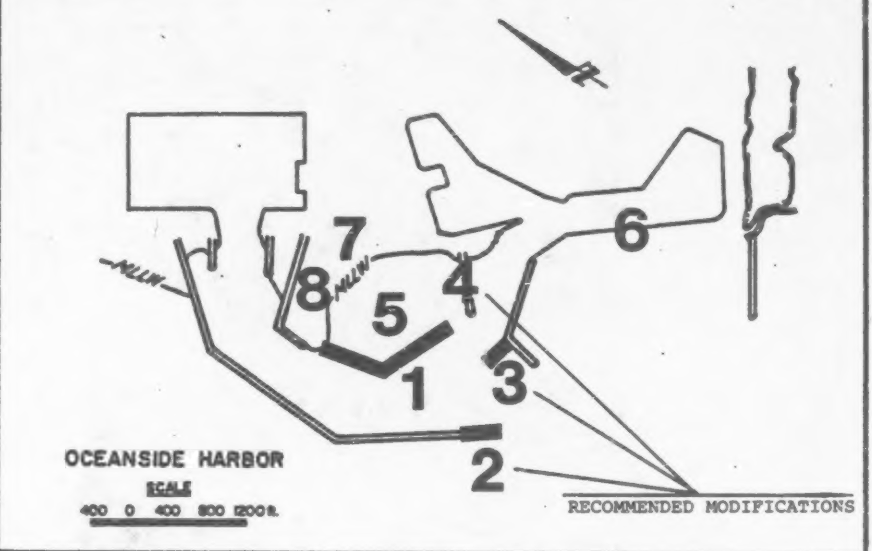
3.0 HARBOR DESIGN PROBLEM

3.1 Studies by military and civilian jurisdictions to determine if harbor facilities should be modified have focused on mitigating environmental and economic loss resulting from the original design flaws of the breakwater and jetties for the military Del Mar Boat Basin. Construction of the civilian harbor itself was justified partly by the perceived need for dredged material to correct downcoast beach erosion.

3.2 Planning studies authorized by Congress in 1967 and 1969, however, included potential expansion of the recreational harbor as a means of providing a beneficial cost ratio in support of modification of the breakwater and jetties, as well as to meet a growing public demand for recreational boating facilities. The potential of expanding the civilian harbor within the existing breakwater was made possible when the U.S. Marine Corps, which has jurisdiction over the harbor's turning basin area, declared that this area would not be needed for military operations and could be used for civilian harbor expansion. The studies established that Oceanside Harbor needed to be expanded in order to become self-supporting, and that there was substantial demand for expanded facilities. However, the Oceanside Harbor District is not seeking expansion of its facilities at this time.

3.3 Shoaling of the entrance channel and related wave surge problems also were well documented in the planning studies. The downshore littoral drift generally carries silt and sand from north to south. However, in certain seasons the reverse is true. It is estimated that some 200,000 cubic yards of material per year is trapped in the harbor entrance, with much higher quantities moving north or south, depending on the season. Periodic maintenance dredging is required and its costs are shared by the Department of the Navy and the Corps of Engineers. The FY 87 President's Budget appropriated $480,000 to the Corps for this purpose. Depths in the harbor entrance change radically in response to changes in sediment transport, fluctuating as much as 5 feet in a single day, causing navigation problems and creating areas too shallow for sailboats with fixed keels and for the larger commercial boats.

3.4 Ocean wave action at this location is dominated by northern hemisphere swells from late fall to spring and by southern hemisphere swells during other periods. Waves generally approach the shore from the southwest during both wave seasons. The harbor entrance is sheltered from waves by features of the coastline and by offshore islands which block deepwater waves from the north and northwest, but is not sheltered from waves out of the south or southwest. Waves of from 6 to 10 feet are not uncommon in the area, and the harbor has an excessive surge problem during periods of heavy surf. When this problem occurs, the entrance, which is open to the southwest, becomes hazardous and boat slips in the harbor can be damaged. Surge may reach a height of 6 to 8 feet within the harbor entrance during winter storms. Shoaling in the harbor entrance complicates this situation by causing breakers to form as the waves cross areas of shallow water. Even experienced sailors and commercial boatmen have been swamped or overturned within the harbor breakwater under this circumstance, resulting in injury and loss of life as their craft are smashed against the jetty.

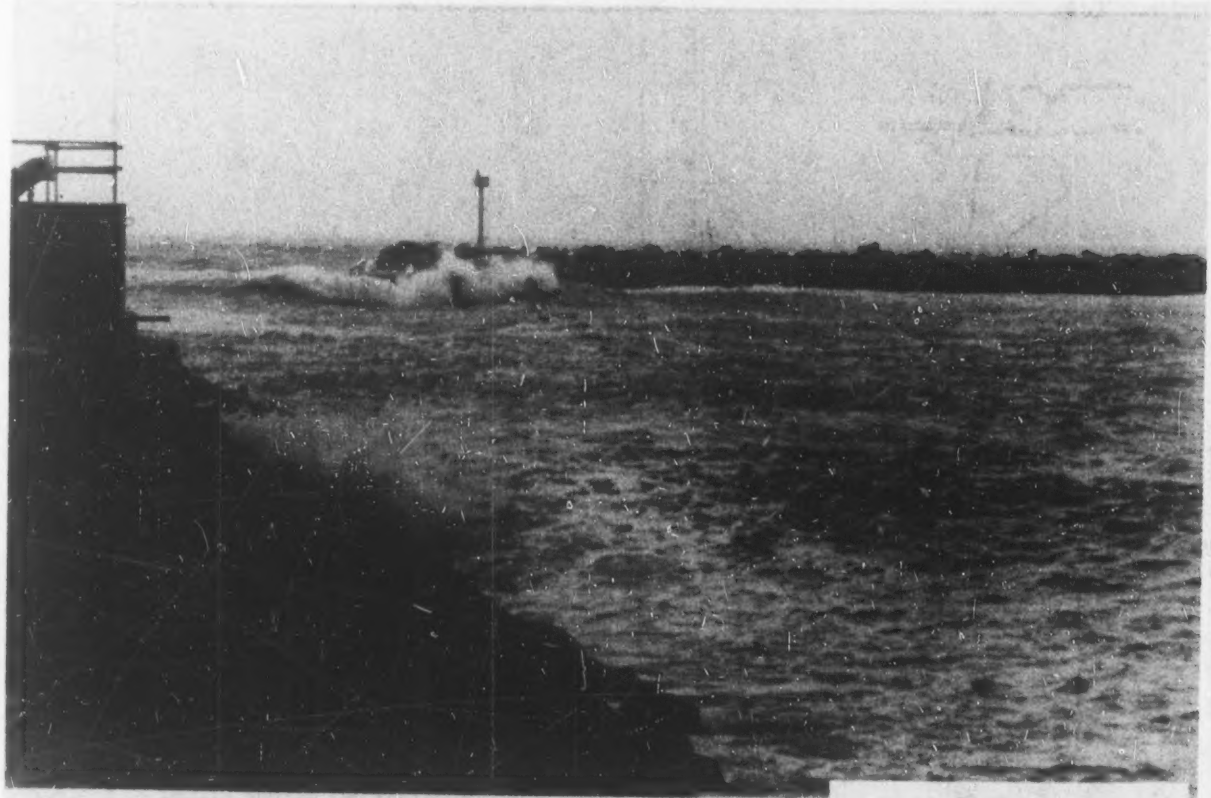

OCEANSIDE HARBOR
SCALE
400 0 400 800 1200 ft.
MLLW
MLLW
1
2
3
4
5
6
7
8
RECOMMENDED MODIFICATIONS

CANDIDATE PLAN NINE:

PLAN COMBINING BENEFICIAL FEATURES OF OTHER PLANS

1. Inner breakwater, 2,100 feet long
2. North Breakwater extension, 300 feet long (Recommended)
3. Stub groin, 250 feet long (Recommended)
4. Remove entire North Groin (Recommended)
5. 650 new slips, 40 moorings
6. 100 new slips in existing harbor
7. 144 dry storage spaces
8. 750 parking spaces

Figure 3 Candidate Plan Nine



OCEANSIDE HARBOR ENTRANCE
Taken From South Jetty
Looking Toward North Jetty
Calm Seas

4.0 HARBOR DESIGN SOLUTIONS

4.1 Alternative design solutions to the problems surrounding the Oceanside Harbor have been under study in a multi-stage process over a number of years. Among the many options considered, nine candidate plans were summarized in the 1983 Navigation Study Progress Report. Evaluations were based in part on preliminary results of Waterways Experiment Station model tests of various breakwater and jetty modifications on their ability to reduce shoaling and surge and storm wave damage. The review process also included economic feasibility and review by local interests at a public meeting.

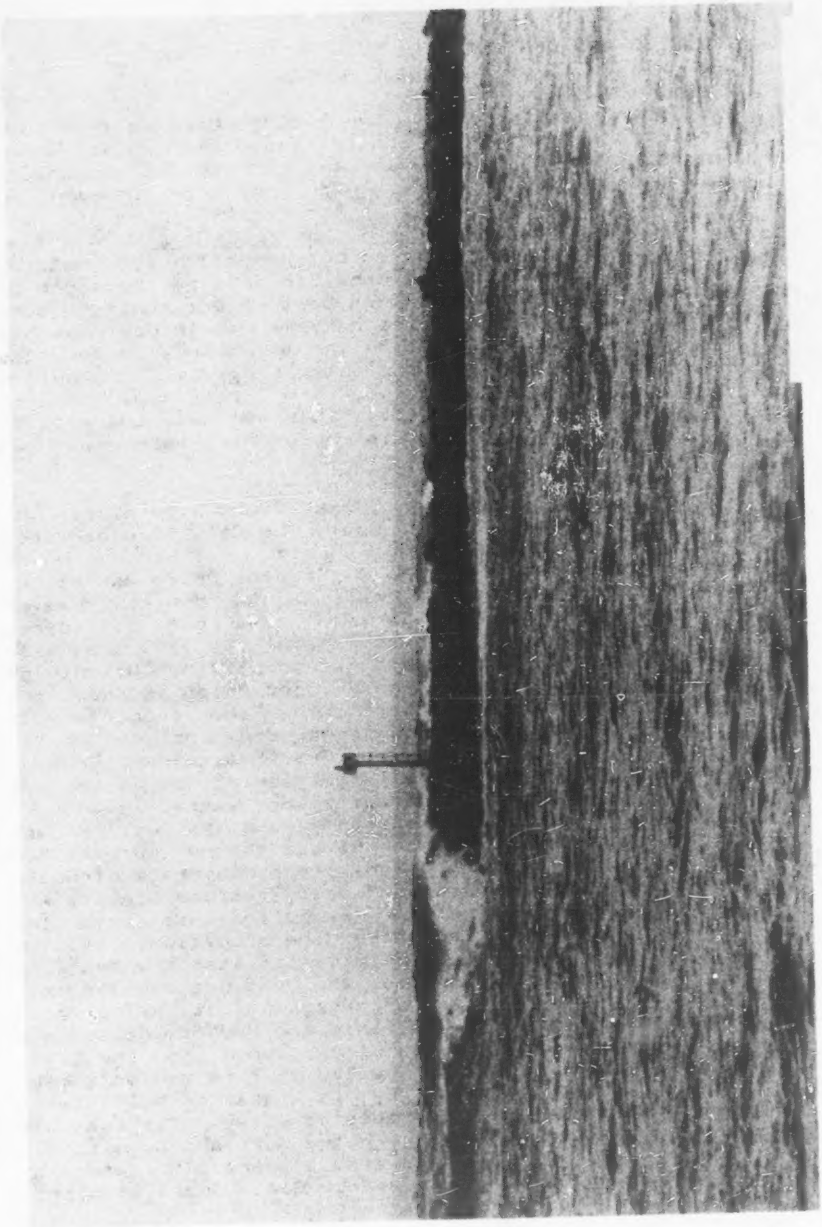
4.2 Of the nine plans reviewed, the last (#9) appears to merit serious consideration for its potential of mitigating the safety hazards and damage problems that result from surge and storm wave action within the harbor breakwater. Its configuration also provides a base for the potential expansion of the harbor at some date in the future, although the Oceanside Harbor District and the City of Oceanside at this time wish to focus entirely on the safety and damage problems that result from existing defective design.

4.3 Key features of plan (#9) include a 300-foot extension of the north breakwater, a 250-foot stub groin on the south jetty, and removal of the entire north groin, which is submerged and constitutes a navigation hazard. A feature which would be omitted from the requested study at this time is the proposed 2,100 foot inner harbor breakwater which would have as its purpose the formation of an inner sheltered basin for the expansion of recreational facilities. One design advantage deleted by this omission will be the desired separation of military and civilian craft within the harbor, however, this objective is not eliminated and can be achieved at a later date, under the modified plan (#9).

5.0 WORK TO BE DONE

5.1 Considerable work and expense have gone into the studies that are summarized in the 1983 Navigation Study Progress Report. The suggested modifications to the breakwater and jetty contained in the modified plan (#9) are urgently needed in order to protect both civil and military interests at the joint use harbor. Loss of life and injury has impacted both civilians and military personnel who use the harbor facilities. It is therefore the contention of the Oceanside Harbor District and the City of Oceanside that the feasibility study should be completed as soon as possible so that necessary design modifications can be made to both military and civilian facilities that constitute the protection of the joint use harbor.

5.2 Work remaining to be completed under the feasibility study phase of this proposed Navigation project is minimal. It includes confirmation and updating of existing studies, additional environmental analysis and a full environmental assessment, and presentation of findings to the public and to appropriate local, state and federal agencies for comment. We believe this work can be accomplished during FY87 within the recommended appropriation of $110,000.



OCEANSIDE HARBOR ENTRANCE
— North Jetty
Calm Seas

6.0 APPENDIX

6.1 INJURIES AND DEATHS CASE HISTORIES AT OCEANSIDE HARBOR

6.1.1 On November 21, 1983, two young Marines from Camp Pendleton set out on a fishing expedition just after dusk. Cpl. Billie Joe Parrish, 22, had just purchased a 10-foot outboard skiff. His companion Stewart D. Poulsen, told officers that they went fishing off Camp Del Mar bouy #3 inside the harbor breakwater. The fish were biting but they had run out of bait and motored across the harbor to the Cape Cod area on the south of the harbor and purchased more bait. On their return toward the entrance of the harbor, their boat was hit by waves and swamped. Both men tried to swim for the nearby rock jetty of the outer breakwater. Poulsen made it and crawled along the breakwater between breaking waves to get help. Parrish never made it to the rocks and drowned. His body was recovered two weeks later.

6.1.2 On Sunday, February 13, 1983 at about 3:30 a.m., the 42-foot commercial fishing boat, The City of Oceanside, began its regular run for live bait. It had a crew of four experienced boatmen. Chester Dolan was at the helm. There was a small craft warning posted. Waves were breaking around six feet and not considered dangerous for this size boat. The City of Oceanside was valued at $75,000 and had about $15,000 worth of gear and nets on board. As Skipper Dolan turned the vessel north at the harbor mouth, they encountered a heavy set of waves. The concerned crew included Howard Schultz, 51, David Dreyer and Fred Hatfield. Crewman Schultz noticed that the large fishing net at the aft of the vessel was in danger of being washed overboard by the waves. Schultz went to secure the net. He was hit by a large wave and both he and the net were washed overboard. The other crewmen, in a desperate struggle with the elements and net, finally rescued Schultz who was entangled in the net. They pulled him into the boat but the net fouled the engine propeller, killing the power. The boat was helpless against the pounding surf. Within a few minutes, the boat was pounded into the south jetty. It was breaking up fast. The crew members, Skipper Dolan, Hatfield and Dreyer, decided to abandon ship and successfully jumped to the jetty rocks. Schultz, however, yelled that he couldn't make it, apparently weakened by his ordeal of being swept overboard earlier. A few seconds later, the boat was pounded to pieces by the heavy surf and Schultz was killed. His body was recovered a short time later by emergency personnel from a nearby Coast Guard Station.

6.1.3 An experienced sailboat racing crew lost one of its members in a similar accident in the harbor entrance November 30, 1985. At about 3 p.m., the 30-foot sailboat, "Pudmuckle" was returning from a day of racing in outer waters. The crew included the Skipper Larry Long, crewmembers Frank Luchsinger, Ann Marie Smith, Doug Ross, George Spitzenfeil and R. Daniel Kuntz. (Kuntz had been washed overboard in 1983 two hours after the fishing boat accident that killed Schultz. Kuntz was rescued and the crew saved the ship in that incident. But in the "Pudmuckle" case, the story ended tragically.)

As the sailboat entered the harbor entrance, heavy surf hit the vessel stern. One wave knocked Skipper Long into the water. Kuntz and Miss Smith were at the helm. The vessel broached and came about facing the wind. It was hit by another large wave, and the rudder broke under the pressure. Another wave pounded the boat onto the rocks, bow first. The crew scrambled to the jetty rocks. Miss Smith, Kuntz, Spitzenfeil and Ross were able to jump to safety but Luchsinger got caught in life lines. He suffered severe injuries as the boat was being pounded to pieces on the rocks. He was rescued but died a short time later of severe trauma to the chest. Skipper Long was rescued.

6.2 STORM DAMAGE COSTS

The type of floating dock system installed in Oceanside harbor normally has a life span of from 15 to 20 years. Installation of these new concrete floats with thru-rods has made a great improvement and cost reduction, but until the harbor entrance is correct, Oceanside Harbor will continue to have unnecessary repairs of utilities, wood and roller assemblies and a rapid failing of floats. The floats on the Transient Dock, installed in 1978, will have to be replaced within 1 to 2 years at a cost of $90,000 (8 to 8 years normal life span). T-Dock floats will require major work in 2 years (4 year normal life span).

All of the hollow spun piles are being replaced on a 5-year plan. Fifteen of the piles have broken off. After pulling, checking and replacing, 40 others have been badly cracked just below the mud line. The Harbor District has had to add more piles to the ends of the fingers and main walk to reinforce lthe system.

Costs for repairing utilities, etc., are for parts only. Labor time is unknown because maintenance crews are continuously nailing dock lumber, hanging pipes, tying boats, tightening cleats and bolts and pumping docks. A rough estimate of time would 30 hours per week, or $30,000 per year.

Additional examples of damage costs due to surge are as follows:

1. **Commercial dock & Sportfishing Dock (1976-1986 - $309,000)**

   a) Replaced in 1976-77 (normal life of 15 to 20 years, should have been good until at least 1991/92 -- $123,000.

   b) 1978 through 1982 - expended $40,000 on repairs.

   c) Commercial Dock replaced in 1983 (life span of only 5 years) - $40,000.

   d) 1983 - expended $4,000 on repairs.

   e) Sportfishing Dock replaced in 1984/85 (life span of only 7 years) - $100,000.

   f) 1985 through 1986 - expended $2,000 on repairs.

2. **Transit Dock (1978-1986 - $140,000)**

    a) Transient Dock slip 16-24 were replaced in 1978 at a cost of $40,000.

    b) Transient Dock slip 16-24 were replaced in 1980/81 at a cost of $80,000 (life span of 2 years).

    c) Repair of utilities, wood gusset, roller assembly 1978 through 1986 - $20,000.

3. **Y-Dock (1978-1986 - $127,000) - Lost Revenue $445,500**

    a) Y-Dock original length - 1,200 feet.

    b) 300 feet replaced in 1978-80 at a cost of $60,000.

    c) 300 feet replaced in 1985 at a cost of $40,000.

    d) 600 feet have not been replaced due to surge and swell.

    e) Repair to utilities estimated at $27,000.

    f) Lost revenue - $49,500 per year due to the 600 feet of dock not replaced.

4. **Coast Guard Dock (1973-1986 - $186,800)**

    a) Coast Guard Dock installed in 1973 at a cost of $139,000.

    b) Replaced in 1981 at a cost of $40,000 (7 year life span).

    c) Cost of repairs to utilities - $7,800.

5. **Launch Ramp Dock (1982-1986 - $83,200)**

    a) Launch ramp and tie-up dock replaced in 1982/83 at a cost of $82,000.
    b) Repair of wood and roller assembly - $1,200.

6. **J-Dock (1984-1986 - $519,638)**

    a) J-Dock replaced in 1984 at a cost of $519,638.

    b) Repair of utilities, roller wood - $2,000.

7. R through T Docks (1984-1986 - $1,671,793)

a) R through T Docks have been replaced from 1984-86 at a cost of $1,667,793.

b) Repair of utilities - $4,000.

8. A through I Docks (1978-1986 - $225,000)

a) Annual budget for repair of docks A through I, the old docks left in the Harbor, has been $20,000 to $30,000 per year, dropping as new docks are installed.

9. Rip Rap Replacement (1982-1987 - $160,000)

a) Repair of riprap has been $20,000 per year for past 4 years, with $80,000 budgeted in 1986/87 for major work in launching ramp area.

Repair & Replacement:

Totals 1978 to 1986	=	$1,441,431
Lost Revenue	=	445,500
TOTAL COSTS	=	**$1,886,931**

6.3

COMMERCIAL VESSELS

The following commercial vessels are berthed in Oceanside Harbor:

Owner/Business Name	Boat Name	Length	Type of Commercial Activity
R. Dunn	Espada	42'	Fishing
J. Donnelly	Querida	47'	Fishing
F. Pahl	Fishin'n Fever	29'	Fishing
D. Piro		24'	Fishing
D. Calloway	MaryAnn	30'	Fishing
J. Guth	Ruthie	37'	Fishing
G. Lauro	Maria Madre	36'	Fishing
B. Breakfield	Convincer III	32'	Fishing
D. McWha	Wharf Rat	25'	Fishing
C. Connor	Sweet C	27'	Fishing
M. Malley	Cardiff Rose	40'	Fishing
R. Grant	Big Eye	22'	Fishing
H. Eaton	Pacific Sun	30'	Fishing
P. Sertic	LoAn	43'	Fishing
R. Miller		20'	Fishing
T. Ptak	Donna H.	22'	Fishing
P. Ghio	San Clemente	25'	Fishing
J. Bowen	Lisa Jane	20'	Fishing
T. Pendleton	Lois B.	25'	Fishing
D. Parnell	Average White Boy	17'	Fishing
D. Whitehill		20'	Fishing
J. Masterson	Stango	27'	Fishing
E. Howell	Morning Star	32'	Fishing
J. Jones	Trojan	40'	Live Bait Fishing
Helgren's Sportfishing	Electra	68'	Sportfishing Charters
Helgren's Sportfishing	Sea Trek	50'	Sportfishing Charters
Helgren's Sportfishing	Oceanside 95	95'	Sportfishing Charters
Helgren's Sportfishing	Tortuga	45'	Sportfishing Charters
Helgren's Sportfishing	(Subleased Space)	45'	Sportfishing Charters
R. Stanlay	Pussycat	27'	Charter Fishing Trips
Marine Review Comm.	San Diego State Univ.	20'	Research
Cal. Marine Review	Metermaid	24'	Research
Eco Systems	Osprey	30'	Research
D. Carlson	Fisherette	40'	Research
Hydra Marine	Andromeda	30'	Salvage
Hydra Marine		14'	Salvage
D. Miller	Cobra I	37'	Diving & Salvage
D. Miller	Cobra II	23'	Diving & Salvage
Oceanworks	Diver	36'	Oil pipe hookups
Oceanworks	Ranger	43'	for power plants
U.S. Coast Guard	Cutter Point Hobart	82'	Open Water Patrolling

The following trailered commercial vessels are launched at Oceanside Harbor:

Owner/Business Name	Boat Name	Length	Type of Commercial Activity
Eco M	Eco M	21'	Research
U.C. Santa Barbara	Sea Pig	23'	Research
Marine Eco Consult.	Better Benthos	23'	Research
West Teck	Pelican	23'	Research

TOTAL: 45 Commercial Vessels

6.4

PRIOR REPORTS AND EXISTING PROJECTS IN THE OCEANSIDE HARBOR AREA

Since the harbor was first built in 1942, there have been numerous evaluations of harbor expansion and of the shoaling problem and associated downcoast beach erosion. While harbor capacity has increased as a result of implementing recommendations of these studies, the downcoast beaches have not been stabilized. Study findings and recommendations are shown on table 1.

Table 1: Prior Reports, Oceanside Harbor

REPORT	FINDINGS AND RECOMMENDATIONS
REPORT ON A PROGRAM FOR INSTALLING, MONITORING, AND EVALUATING THE EFFECTIVENESS OF A SAND BYPASS SYSTEM AS A MEANS OF MAINTENANCE OF THE HARBOR CHANNELS, OCEANSIDE HARBOR, OCEANSIDE, CA. March 1982. LA District Corps of Engineers	Shoaling in the harbor is a result of drift from both north and south. A continuously operating system of jet pumps and fluidizers may intercept sediment entering the harbor and will provide constant nourishment for downcoast beaches. Such a sand bypass system will not completely solve the erosion of downcoast beaches, as the sediment input to the area from local streams has diminished in the past 40 years. Installation of the system was recommended and is proceeding.
SURVEY REPORT FOR BEACH EROSION CONTROL, SAN DIEGO COUNTY, VICINITY OF OCEANSIDE. CALIFORNIA. Sept. 1980. LA District Corps of Engineers	Beach erosion control is necessary to prevent serious damages to public and private property along Oceanside Beach. Recommendation calls for a 10,800-foot long offshore breakwater with 4 groins constructed perpendicular to the beach for further stabilization and as transition structures to downcoast areas.

Table 1 -- continued

REPORT	FINDINGS AND RECOMMENDATIONS
OCEANSIDE HARBOR AND BEACH, CALIFORNIA: DESIGN OF STRUCTURES FOR HARBOR IMPROVEMENT AND BEACH EROSION CONTROL June 1980 U.S. Army Engineer Waterways Experiment Station	Model studies indicate the best way to increase harbor area and reduce wave surge is creation of inner harbor combined with extension of both the South Jetty and the North Breakwater. Several configurations were shown to be feasible.
SHOALING STUDY, OCEANSIDE SMALL CRAFT HARBOR. 1 Feb 1968 Moffatt and Nichol, Engineers	Shoaling of entrance channels is the result of both downcoast and upcoast drift. South Jetty and South Groin should be extended seaward to reduce recycling of sediment dredged from the harbor and placed on downcoast beaches.
SURVEY REPORT FOR NAVIGATION, OCEANSIDE HARBOR, OCEANSIDE (CAMP PENDLETON), CA June 1963, LA District Corps of Engineers	The small craft harbor designed and built by local interests conformed to Corps standards and would have been justified as a Federal project. Federal maintenance of the harbor was recommended.
DESIGN WAVES FOR PROPOSED SMALL CRAFT HARBOR AT OCEANSIDE, CALIFORNIA March, 1960. Marine Advisors	Based on 1900-1958 storm history, shoreline would best be protected if sheltered from directions of greater than 260° azimuth (from north). Without protection, net littoral drift downcoast would be about 200,000 cubic yards per year.
INTERIM REPORT ON FEASIBILITY OF LOCATING A PROPOSED RECREATIONAL HARBOR ENTRANCE IN THE LEE OF THE THE EXTENDED BREAKWATER AT DEL MAR BOAT BASIN, CAMP PENDLETON, CALIFORNIA. October 1958. LA District Corps of Engineers.	Construction of civilian harbor would benefit downcoast beach, improve alinement of entrance channel, and have no detrimental impact on military use of Del Mar Boat Basin. Report recommended that the the Oceanside Small Craft Harbor be constructed.
REPORT ON SAND ACCRETIONS AT DEL MAR HARBOR, CAMP PENDLETON, CALIFORNIA July 1958. Leeds, Hill, and Jewett, Engineers	Average annual accumulation of sediment in the harbor entrance will be 250,000 cubic yards, requiring biennial dredging of 500,000 cubic yards. Report concluded that the South Jetty construction would reduce upcoast drift into the harbor entrance.

Table 1 -- continued

REPORT	FINDINGS AND RECOMMENDATIONS
SHORE PROTECTION AND SMALL CRAFT HARBOR DEVELOPMENT IN OCEANSIDE-CAMP PENDLETON AREA, CALIFORNIA November 1955. Leeds, Hill, and Jewett, Engineers	The Del Mar Boat Basin should be dredged. Oceanside public beach should be restored. Recommendation was for not less than 900,000 cubic yards to be dredged from the harbor area and placed on downcoast beaches.
INTERIM REPORT ON HARBOR ENTRANCE IMPROVEMENT AT CAMP PENDLETON, CALIFORNIA 25 Mar 1953. LA District, Corps of Engineers	Net downcoast littoral drift probably exceeds upcoast by 100,000 cubic yards per year. From 1950-1952, about 1.5 million cubic yards of sediment accumulated in harbor entrance. Recommendation was that jetties be rebuilt to trap sand for periodic beach nourishment.
REPORT FOR THE CITY OF OCEANSIDE ON EFFECTS OF SHORE EROSION AND ACCRETION TO CAMP PENDLETON BOAT HARBOR October 1949. Leeds, Hill, and Jewett, Engineers	Beaches have been seriously eroded since Camp Pendleton Harbor was constructed. An adequate small-craft harbor is needed in the area. Report recommends a small craft harbor be constructed using the Oceanside site, and that beaches downcoast be stabilized.

Mr. **Langner**. We have the Port of Stockton, as it is every year, here, represented by Commission Chairman Harold Berg, offering his services here today as our photographer, and Frank Saunders, Commissioner, and Port Director Alex Krygsman.

Mr. **Krygsman**. Mr. Chairman, I have brought a statement for the record that I would like to have entered.

Mr. **Bevill**. Without objection, it will be made part of the record. This will be made available to the committee.

Mr. **Krygsman**. As I have done for several years, I brought some pictures for you to look at, something for you to remember us by.

I just want to point out, this year the picture on our magazine is a picture of the challenger of the America's Cup, the 12-meter yacht U.S.A. built in Stockton. I wanted you to know it was built in Stockton. I hope it brings the Cup back.

Mr. **Bevill**. Is this tied in with your annual San Francisco Bay Boat Day?

Mr. **Krygsman**. We will tie in with that, too, Mr. Chairman.

Mr. **Bevill**. I was out there and saw it one day. I was really impressed.

Mr. **Krygsman**. Thank you.

I come here for the third year in a row to ask you for the final funding of the completion of the channel deepening. Of course, the reason this is the third request for final funding is that every year we get funded partially for the final completion. This is not a criticism. I got your message. This is praise for the portion that we have got, which was always much larger than the part missing. We were getting 90 percent or 80 percent funded.

[The statement of Mr. Krygsman follows:]

Port of Stockton
General Offices: P.O. Box 2089, Stockton, CA 95201-2089
(209) 946-0246 / TWX 510—765-6661 / TELEX 35-9467

CONGRESS OF THE UNITED STATES

UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON
ENERGY AND WATER DEVELOPMENT

STATEMENT BEFORE THE ENERGY AND WATER DEVELOPMENT APPROPRIATIONS
SUB-COMMITTEE OF THE UNITED STATES HOUSE OF REPRESENTATIVES
APPROPRIATIONS COMMITTEE

BEFORE THE HONORABLE TOM BEVILL, CHAIRMAN
AND MEMBERS OF THE COMMITTEE

Mr. Chairman:

I am Alexander Krygsman, Port Director of the Port of Stockton, Stockton, California.

The Port of Stockton Deepwater Channel Deepening Project is an authorized project, presently under construction.

The Port of Stockton is primarily a bulk port that serves industry and agriculture in the San Joaquin Valley in California and the bulk imports and exports of the Western States, including the coal areas of these States.

The Port of Stockton recognized as far back as 1952 that deeper channels would be needed for the movements of bulk cargoes and requested the Corps of Engineers to deepen the channel in 1952. Coal, grain, fertilizers and many other bulk materials require deeper channels to serve the larger bulk carriers.

The Nation needs ports that can handle larger more economical and more fuel efficient vessels close to the production areas, both agricultural and industrial to conserve energy.

GENERAL OFFICE: 2201 W. WASHINGTON ST., STOCKTON, SAN JOAQUIN COUNTY, CA

Continued
Page 2.

The Port of Stockton is such a port. Its channel is presently being deepened to keep it a viable port that can adequately serve our Nation and California's needs.

The Stockton Channel Deepening Project has overwhelming public support. The City of Stockton, San Joaquin County, neighboring cities and counties and the State of California support it.

This urgent project is now more than three-fourths done and it deserves continued funding to completion. We urge you to appropriate the same amount as contained in the proposed President's budget.

I wish to also state again for the record that the Port of Stockton is in support of deepening the Sacramento Channel.

The attached material describes some of the work being done in connection with the Stockton Channel Deepening Project.

Respectfully yours,

Alexander Krygsman

Alexander Krygsman
Director, Port of Stockton
Stockton, California

AK:jc

Attachment

4/5/86

Mr. BEVILL. Now if we finished it, you may not come back to see us.

Mr. KRYGSMAN. That probably will not happen.

Mr. MYERS. I thought we put enough in to finish it last year.

Mr. KRYGSMAN. You did. But in the final analysis we did not get enough to finish it.

Mr. MYERS. You were so convincing last year we put it in.

Mr. KRYGSMAN. We got three years ago 90 percent or 80 percent. The next year, I came back for the balance; the next year, I came back for the balance of the balance. Now I am back for the balance of the balance of the balance. We keep on getting 90 percent all the time. There will always be 10 percent left.

I am supporting the President's budget for $3.9 million. And, in addition to supporting the President's budget, I am supporting $1.1 million more to finally complete this channel.

Mr. MYERS. There is never quite enough, is there?

Mr. KRYGSMAN. One of these days, the balance will be so small we can just disregard it, I hope.

I also want to, again, for probably the third or fourth year in a row, support the deepening of the Sacramento Channel, Mr. Fazio.

Mr. FAZIO. Thank you.

Mr. KRYGSMAN. Thank you, Mr. Chairman.

Mr. LANGNER. Next is the Port of Long Beach.

Mr. ALLEN. Mr. Chairman, members of the committee, on behalf of the City and Port of Long Beach I have submitted written testimony in support of the appropriations for the Corps of Engineers' work. Our request is the same as the President's budget, with the exception of additional funds needed to continue the Waterway Experiment Station Data Acquisition Program in Vicksburg, Mississippi, on tidal circulation, wave energy, and ship motion, for the Long Beach and Los Angeles Harbors.

This program is absolutely essential to satisfy regulatory agency requirements in the planning and engineering for expansion of the two complexes and associated navigation channels which are so vitally necessary for our nation's waterways. This funding was appropriated by the Conference Report last year for fiscal year 1986. Therefore, we respectfully request that we reappropriate this money again.

Thank you for permitting me to make this presentation.

[The statement of Mr. Allen follows:]

TESTIMONY OF E. D. ALLEN
DIRECTOR OF ENGINEERING, DESIGN AND DEVELOPMENT FOR THE PORT OF LONG BEACH
ON BEHALF OF THE
LONG BEACH BOARD OF HARBOR COMMISSIONERS
BEFORE
CONGRESSIONAL ENERGY & WATER DEVELOPMENT SUBCOMMITTEES
WASHINGTON, D. C.
APRIL 16, 1986

I am E. D. Allen, Director of Engineering, Design and Development for the Port of Long Beach, California. I have been authorized by the Board of Harbor Commissioners of the City of Long Beach to represent the Port of Long Beach in regard to appropriations for the Los Angeles-Long Beach Harbors Study, the Los Angeles and Long Beach Harbors Model Study programs, and for remedial maintenance dredging in the mouth of the Los Angeles River.

The Ports of Long Beach and Los Angeles, in cooperation with the Corps of Engineers, have developed a long-range master plan, the so-called "2020 Plan", which demonstrates the need for new navigation channels and 2,600 acres of new landfill development. This document came out of the Los Angeles-Long Beach Harbors Study for future channels and landfill development, which has been in process since 1964 by the U. S. Army Corps of Engineers. The Ports and the Corps wish to continue the study by doing a feasibility report on the project, including physical and numerical model testing and other studies needed for the permitting process. It is therefore urged that the Committee approve an appropriation of $500,000 to continue this study.

The Water Resources Development Act of 1976, Section 123, authorized the Chief of Engineers to operate and maintain the Los Angeles-Long Beach Harbor Hydraulic Model at the U.S. Army Waterways Experiment Station in Vicksburg, Mississippi, as part of the Los Angeles and Long Beach Harbors Model Study. In the President's budget for fiscal year 1987, $140,000 has been included to maintain that model. However, as a portion of the Los Angeles and Long Beach Harbors Model Study, the Corps of Engineers has been assembling data since 1982 to study tidal circulation, wave energy, and ship motion in the San Pedro Bay area. This study is absolutely essential to satisfy regulatory agency requirements and to plan and engineer the expansion of the Port complex and associated navigation channels, as detailed in the Port's "2020 Master Plan." This study must be consecutively funded for several more years if useful results are to be obtained. The President's budget for fiscal year 1987 does not include Operation & Maintenance funding needed to acquire, place, and maintain instrumentation for this program by the Waterways Experiment Station, even though it was appropriated by the Conference Report for fiscal year 1986. It is currently estimated that an appropriation of $1,160,000 would fund this much-needed continued information-gathering program for fiscal year 1987. Congress is therefore respectfully requested to appropriate this $1,160,000, plus the $140,000 for model maintenance, for a total appropriation of $1,300,000 for fiscal year 1987. It is our understanding that the Corps of Engineers is capable of continuing this program if funded.

The modernization and expansion program by the Port of Long Beach is estimated to cost in excess of $400,000,000 of local funds for the decade of the 1980's and a greater growth in the 1990's. The Port has essentially utilized all existing available land areas. The Port has a deep draft tanker terminal with a water depth of -76 feet which is capable of berthing 285,000 DWT ships. But existing depth of the channel serving this berth is only -60 feet. The deepening of this channel and subsequent developments can be carried out only if additional landfills and berths can be provided. Design of these developments is dependent on data obtainable from hydraulic monitoring of San Pedro Bay and hydraulic model testing, together with the results of the Los Angeles-Long Beach Harbors Study.

The Port of Long Beach also concurs with and supports the recommendation of the California Marine Affairs and Navigation Conference and the City of Long Beach on federal funding for remedial maintenance dredging to remove accumulated flood-deposited silt in the mouth of the Los Angeles River. These silt deposits create serious restrictions and hazards to commercial and recreational boating activity in and adjacent to the Long Beach Harbor District. In addition, the Port recommends that these silt deposits be removed, preferably on an annual basis, or at least on a biennial basis as a scheduled item of work. The dredged material should be used for filling scoured edges of the river channel, replacement of the sand on the beaches in Long Beach down the coast from the Los Angeles River, or creation of new landfills in adjacent areas. The replacement is necessary because of the interruption of the normal littoral processes by the flood control channel and the influence of the federal breakwater on normal wave action, which create a reduction in sand movement and serious beach erosion under certain storm conditions. It is estimated that the annual rate of siltation is approximately 200,000 to 300,000 cubic yards and is influenced by operational decisions at the Corps of Engineers' Hansen Dam located at the headwaters of the river. It is imperative, in our opinion, that a more assured long-range remedy be found for the Los Angeles River mouth if navigational utility is to be maintained. House Document 843, 76th Congress, 3rd Session, delegated this maintenance responsibility to the Corps, but developments in the mouth of the River have rendered the authorizations set forth in this document obsolete. Therefore, it is recommended that the existing design elevation be lowered to a depth of -30 ft. and that a scheduled program be established to monitor water depths in the River to insure an operational depth of -20 ft. These actions will allow the Corps to initiate maintenance activities in a more timely and economically feasible manner before the channel becomes completely closed to navigation on one side and excessive scour occurs on the other side. The City and the Port believe that these modifications, as well as an explicit annual maintenance dredging and beach replenishment project would provide such a long-range solution to the siltation problem from the Los Angeles River. It is currently estimated that an appropriation of $1,457,000 would fund this most essential remedial project on an annual basis. Congress is therefore respectfully requested to appropriate this $1,457,000.

Attached hereto is Resolution No. HD 1328, adopted by the Board of Harbor Commissioners of the City of Long Beach on March 17, 1986, and Resolution No. C-2441, adopted by the Long Beach City Council on March 18, 1986, both of which contain data relating to the background of the Los Angeles-Long Beach Harbors Study, hydraulic modeling, and other related matters, and which stresses the need for federal assistance in developing economic, technical, and environmental background information essential to the design and permitting of Port facilities vital to regional and national interests.

Agencies benefiting from these projects in San Pedro Bay include, but are not limited to, the City of Long Beach, the Ports of Long Beach and Los Angeles, the County of Los Angeles, the State of California, and the United States Navy and Coast Guard, plus various state and federal environmental agencies.

Thank you for permitting me the privilege of this presentation.

E. D. Allen
Director of Engineering,
Design and Development

RESOLUTION NO. HD-1328

A RESOLUTION OF THE BOARD OF HARBOR COMMISSIONERS OF THE CITY OF LONG BEACH, CALIFORNIA, REQUESTING THE CONGRESS OF THE UNITED STATES TO APPROPRIATE FUNDS TO CONTINUE THE LOS ANGELES-LONG BEACH HARBORS STUDY, TO CONTINUE THE LOS ANGELES AND LONG BEACH HARBORS MODEL STUDY PROGRAMS, BOTH RELATING TO IMPROVEMENTS IN SAN PEDRO BAY, AND FOR REMEDIAL MAINTENANCE DREDGING IN THE MOUTH OF THE LOS ANGELES RIVER, ALL BY THE UNITED STATES ARMY, CORPS OF ENGINEERS, AND MAKING A DETERMINATION RELATING THERETO.

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CITY CLERK
LONG BEACH, CALIF.
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WHEREAS, the Ports of Long Beach and Los Angeles in San Pedro Bay, California, are two of a limited number of sites on the West Coast of the United States which possess the potential for deep water ports as recommended in the West Coast Deep Water Port Facility Study conducted by the United State Army, Corps of Engineers; and

WHEREAS, the Ports of Long Beach and Los Angeles have a record of both physical and fiscal growth to the extent that together the two are presently handling over 98 million metric tons of cargo annually (on a fiscal year basis), which cargo is valued at over 35 billion dollars; and

WHEREAS, the growth and activity of the Ports of Long Beach and Los Angeles have a significant regional and national

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economic effect; and

WHEREAS, in excess of two billion dollars in federal revenues are derived annually through United States Customs duties on foreign imports passing through the Ports of Long Beach and Los Angeles; and

WHEREAS, both Ports are now, and are increasingly becoming, hard-pressed to provide facilities to meet the needs of the shipping industry, and to that end are conducting extensive studies, in conjunction with federal studies, to determine navigational, transportation, and environmental requirements necessary to provide economic and adequate surge-free berthing and cargo-handling facilities; and

WHEREAS, all existing land in the Port of Long Beach which can be developed for shipping operations has been utilized and to meet the needs of the following decade, the design, permitting and construction of new lands must commence immediately; and

WHEREAS, continuation of the studies currently underway by the Corps of Engineers, consisting of the Los Angeles-Long Beach Harbors Study originally requested by the Committees on Public Works of both the House and the Senate, and the Los Angeles and Long Beach Harbors Model Study programs, including maintenance and operation of the San Pedro Bay Hydraulic Model at Vicksburg, Mississippi, as authorized by Section 123 of the Water Resources Development Act of 1976, is urgently needed for use in the design and permitting processes for future landfills for Port Development; and

WHEREAS, it is necessary, as part of the Los Angeles and Long Beach Harbors Model Study, to obtain long-term data on the hydraulic regime in San Pedro Bay, which activity consists of a monitoring program using self-contained recording instruments to determine currents and energy entering the Bay in order to augment earlier monitoring and to verify specific needs for hydraulic model testing to assure tidal flushing and surge-free berthing; and

WHEREAS, the Los Angeles River is the largest of numerous flood-control channels constructed and maintained jointly by the Los Angeles County Flood Control District and the United States Army, Corps of Engineers, and silt deposit from heavy storm runoff in recent years accumulating in the mouth of the Los Angeles River between the City and the Port of Long Beach constitutes a restriction and hazard to both commercial and recreational boating; and

WHEREAS, the Board of Harbor Commissioners of the City of Long Beach, as a properly constituted and financially responsible local agency, by its Resolution No. HD-890, adopted August 3, 1965, expressed its intent to enter into such agreements as may be reasonably required to further federal projects for the development and improvement of Long Beach and Los Angeles Harbors; and

WHEREAS, the Director of Port Planning of the City of Long Beach Harbor Department has determined, in a review of the applicability of the California Environmental Quality Act (CEQA) to this Resolution, that under the provisions of Sections 15301 and 15378 of the State Guidelines implementing CEQA, this Resolution is not subject to the requirements of CEQA;

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NOW, THEREFORE, the Board of Harbor Commissioners of the City of Long Beach resolves as follows:

1. The Board of Harbor Commissioners hereby finds and determines that this Resolution is not subject to the provisions of the California Environmental Quality Act.

2. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers, to continue the Los Angeles-Long Beach Harbors Study.

3. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers, to maintain the San Pedro Bay Hydraulic Model at the Waterways Experiment Station at Vicksburg, Mississippi, as part of the Los Angeles and Long Beach Harbors Model Study.

4. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers, to continue the hydraulic monitoring program of San Pedro Bay to obtain prototype data essential to long-range planning and design, also as part of the Los Angeles and Long Beach Harbors Model Study.

5. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers, in conjunction with the Los Angeles

County Flood Control District, to engage in the necessary maintenance dredging at the mouth of the Los Angeles River to remove silt deposits which have accumulated at that location.

6. That the Executive Director of the Long Beach Harbor Department be, and he is hereby, directed to send copies of this Resolution to the United States Senators and to Members of the House of Representatives from California, with a letter requesting their assistance in presenting this Resolution before the proper Congressional committees.

7. That the Executive Director of the Long Beach Harbor Department be, and he is hereby, further directed to send copies of this Resolution to the President of the United States; the Director, Office of Management and Budget; the Secretary of the Army; the Chief of Engineers, the Board of Engineers for Rivers and Harbors, the Division Engineer-San Francisco, the District Engineer-Los Angeles, all of the United States Army, Corps of Engineers; and to such other interested persons as he may deem appropriate.

The Secretary of the Board shall certify to the passage of this Resolution by the Board of Harbor Commissioners of the City of Long Beach, shall cause the same to be posted in three (3) conspicuous places in the City of Long Beach, and shall cause a certified copy of this Resolution to be filed forthwith with the City Clerk of the City of Long Beach and it shall thereupon take effect.

I hereby certify that the foregoing Resolution was

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adopted by the Board of Harbor Commissioners of the City of Long Beach at its meeting of March 17, 1986, by the following vote:

Ayes: Commissioners Talin, Gray, Hauser, Langslet, DuVall

Noes: Commissioners None

Absent: Commissioners None

Not Voting: Commissioners None

David L. Hauser
Secretary

RLL:cy
3/13/86
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RESOLUTION NO. C-24111

A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF LONG BEACH URGING THE CONGRESS OF THE
UNITED STATES TO AUTHORIZE AND FUND THE ANNUAL
DREDGING OF THE MOUTH OF THE LOS ANGELES RIVER

WHEREAS, the mouth of the Los Angeles River, which is the largest of the numerous flood control channels in Los Angeles County, is located within the city limits of the City of Long Beach; and

WHEREAS, due to heavy rainfall runoff, great quantities of silt and sediment are deposited at the mouth of the Los Angeles River and in the channel seaward thereof in Queensway Bay; and

WHEREAS, the annual rate of such siltation is approximately 200,000 to 300,000 cubic yards, and is influenced by operational decisions at the Corps of Engineers Hansen Dam situated at the headwaters of the Los Angeles River; and

WHEREAS, the City-owned Catalina Landing Facility, from which a private company operates daily scheduled passenger service to and from Catalina Island under a permit from the City, and the Golden Shore Small Boat Launching Facility which is owned and operated by the City for the launching of small boats, are both located at the mouth of the Los Angeles River; and

WHEREAS, said silt deposits create substantial hazards and cause serious problems and significantly restrict, limit and hinder the use of the navigable waters at the mouth of the Los Angeles River for commercial and recreational boating activities,

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especially for commercial transportation between Long Beach and Catalina Island; and

WHEREAS, the shoaling about the piers of the Queensway Bridge created by the silt deposits may affect the structural integrity of said bridge; and

WHEREAS, the maintenance dredging of the mouth of the Los Angeles River and the basins and channel seaward thereof in Queensway Bay is necessary so that said navigable water areas and the adjacent facilities may continue to be used safely and without danger of loss of life and property; and

WHEREAS, the maintenance dredging of the mouth of the Los Angeles River to insure continuation of safe navigation is within the jurisdiction of the United States Army, Corps of Engineers, and

WHEREAS, the accumulated silt deposits in the mouth of said river should be removed on an annual basis as a scheduled item of work for the Corps of Engineers; and

WHEREAS, due to funding limitations, such maintenance dredging has only been performed on an occasional basis by the Federal Government and navigational dredging responsibilities have thus been unnecessarily shifted to local government;

NOW, THEREFORE, the City Council of the City of Long Beach resolves as follows:

Section 1. The Congress of the United States is urged to appropriate approximately $1,200,000 for the United States Army, Corps of Engineers, to perform the necessary maintenance dredging at the mouth of the Los Angeles River and

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the basins and channel seaward thereof in Queensway Bay to remove deposits of silt and sediment which have accumulated at that location to lower the existing design elevation to a depth of minus thirty (30) feet mean low low water (MLLW).

Sec. 2. The Congress of the United States is requested to authorize and fund an annual maintenance dredging project for the mouth of the Los Angeles River by the Department of Army, Corps of Engineers in order to insure an operational depth of minus twenty (20) feet mean low low water (MLLW) and to provide a long range solution to this continuing situation and maintain navigational utility.

Sec. 3. The City Clerk is directed to send certified copies of this resolution to the United States Senators and the Members of the House of Representatives representing the Long Beach area; the Secretary of the Army; the Chief of Engineers of the Department of the Army; and to such other interested persons as may be deemed appropriate.

Sec. 4. The City Clerk shall certify to the passage of this resolution by the City Council of the City of Long Beach and it shall thereupon take effect.

I hereby certify that the foregoing resolution was adopted by the City Council of the City of Long Beach at its

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meeting of March 18, 1986, by the following vote:

Ayes: Councilmembers: Wilder, Hall, Clark, Wilson, Sato, Kell.

Noes: Councilmembers: None.

Absent: Councilmembers: Edgerton, Tuttle, Harwood.

Shelba Powell
City Clerk

B:rg
02-26-86
D-168

Mr. **Langner**. Port San Luis Harbor District is represented by Jim Blecha.

Mr. **Blecha**. Port San Luis Harbor is a very small harbor in Central California, San Luis Obispo County. We have a simple request.

You gave us last year $600,000 for our authorized breakwater study. We have received only $150,000 of that amount.

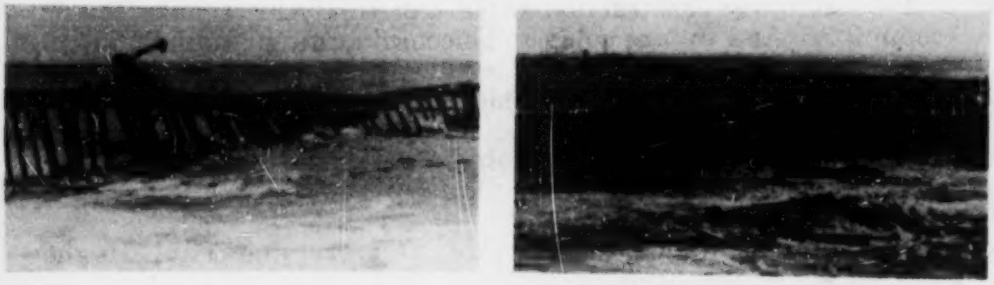
This year's request of $500,000 did not survive in Congress. We would appreciate your help of getting all that you gave us last year.

[The statement of Mr. Blecha follows:]

BOARD OF COMMISSIONERS
JIM BLECHA, President
DENNIS JOHANSEN, Vice-President
GERARD PARSONS, Secretary
JIM CHAMBERS, Commissioner
STEWART JENKINS, Commissioner

PORT SAN LUIS HARBOR DISTRICT

P.O. BOX 249 • (805) 595-2381
AVILA BEACH, CALIF. 93424
WILLIAM S KING, Harbor Manager
MICHAEL S. VIVRETTE, Treasurer
K. ROBIN BAGGETT, Attorney



STORM DAMAGED PIER -- TOTALLY DESTROYED

PORT SAN LUIS IS AN AUTHORIZED PROJECT!

PORT SAN LUIS IS A COMMERCIAL HARBOR!

PORT SAN LUIS HAS NO SOUTHERLY WINTER PROTECTION!

30 MILLION DOLLARS IN REPLACEMENT COSTS WERE REQUIRED TO REPLACE STORM DAMAGED INSTALLATIONS.

$600,000 HAS BEEN APPROPRIATED BY THE CONGRESS OF THESE UNITED STATES FOR ADDITIONAL BREAKWATER STUDIES.

$150,000 HAS BEEN EXPENDED BY THE CORPS OF ENGINEERS ON PRELIMINARY STUDIES, FOR REQUIRED MODIFICATIONS.

WE REQUEST THAT THE BALANCE OF THIS APPROPRIATION ($450,000) BE RELEASED TO THE CORPS FOR THE PORT SAN LUIS BREAKWATER MODIFICATION STUDY.

FURTHER, WE REQUEST THAT $50,000 ADDITIONAL BE APPROPRIATED TO ENABLE THE CORPS TO COMPLETE THEIR STUDY.

TOTAL: $500,000

SUPPORTERS: CALIFORNIA STATE BOATING AND WATERWAYS DEPARTMENT, CALIFORNIA MARINE AFFAIRS AND NAVIGATION CONFERENCE, CALIFORNIA MARINE PARKS AND HARBOR ASSOCIATION, AND CALIFORNIA ASSOCIATION OF HARBOR MASTERS AND PORT CAPTAINS.

Mr. LANGNER. Contra Costa County has Paul Hughey submitting a statement, and Supervisor Tom Powers.

Mr. POWERS. Mr. Chairman, members of the committee, I appreciate very much being here in front of you today. I want to say that the county supports the CMANC list of proposals and also the proposals that your fellow Congressman, George Miller, testified to earlier.

In particular, two projects are of importance to me and the county. One is the Walnut Creek project, which is in the budget for $11,100,000, which we support; also, the Wildcat and San Pablo Creek Flood Control Project, which is in the budget to complete the project for $4 million.

I want to say construction will begin this year, thanks to your committee. And we are going to be coordinating a ground-breaking ceremony with Congressman George Miller some time in May, June or July. If you are available at that time and can come out, we would appreciate it, particularly Congressman Fazio, who is very close to the project—proximity, other ways.

Thank you very much.

Mr. BEVILL. Thank you.

[The statements of Contra Costa County and Paul Hughey follow:]

STATEMENT
OF
CONTRA COSTA COUNTY AND
CONTRA COSTA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

IN SUPPORT OF
PUBLIC WORKS APPROPRIATIONS FOR
FISCAL YEAR 1986-87

FOR THE
WALNUT CREEK PROJECT
AND THE
WILDCAT - SAN PABLO CREEKS PROJECT

TO THE
U. S. HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS, SUB-COMMITTEE ON ENERGY
AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN

SUMMARY

Mr. Chairman and Members of the Committee:

We, the Contra Costa County Board of Supervisors, would like to express the appreciation of Contra Costa County for the accomplishments made possible by your Committee's past appropriations for flood control projects which have had far-reaching benefits to the people of this County. Today we offer testimony in support of appropriations for Fiscal Year 1986/87 on the following two projects:

Construction, Walnut Creek Project

We support the proposed budget amount of $11,100,000 to continue this project. This amount will allow the completion of construction on the San Ramon Bypass Project and the completion of construction on the Upper Pine Creek Project. These two creeks are major tributaries to Walnut Creek. During the recent heavy rains in California the improvements already constructed by the Corps of Engineers have shown the tremendous value of this program to our community.

Construction, Wildcat/San Pablo Creeks

We support the budgeted amount of $4,000,000 to complete the project construction which will begin this year. Flooding from these creeks occurred again this year. The area flooded sorely needs rejuvenation. However, this cannot occur until we solve the continual flooding problem. The County Flood Control District, in cooperation with the U.S. Army Corps of Engineers, and environmental groups, interested agencies, and the local community has developed a "consensus plan" of improvements for these creeks. The plan is equivalent to the authorized project in terms of capacity, and provides for salt marsh enhancement and regional recreational opportunities. The local community is solidly behind the project including providing the local share cost. Further, the environmental impacts will be fully mitigated and the mitigation measures are acceptable to all concerned.

LIB:approp.t2

SUMMARY

Project	Requested Amount Fiscal Year 1987	
San Francisco Bay to Stockton Ship Channel (John F. Baldwin and Stockton Ship Channels)	$5,000,000	1) Complete construction of Stockton Channel; 2) Continue Construction of Southampton Shoals Channel and Richmond Maneuvering Area; 3) Continue hydrological studies of hydraulic salinity barrier for Baldwin Channel on Bay and Delta Model.

April 16, 1986

TESTIMONY

My name is Paul F. Hughey. I am the Executive Director of the Coalition of Labor and Business for Alameda, Contra Costa and Solano Counties, California.

My organization would like to express our appreciation for the continued appropriations the Committee has provided to enable proper planning, design and construction for the San Francisco Bay to Stockton Ship Channel improvement project. This very important improvement is vital to the long range economic viability of the large area it serves. We also greatly appreciate the manner in which the Corps of Engineers is carefully considering the environmental impact of this project within the guidelines provided by the Congress. We approve of the careful analysis of environmental, economic and social factors as they relate to this project and we will cooperate fully in providing any information or assistance the Corps may require to enable proper judgment on initiating further phases of construction.

Background

A brief was filed with the Corps of Engineers in 1958, requesting a study of the feasibility of improving the main shipping channel between San Francisco Bay and the Port of Stockton. As a result, the study was funded by the Congress under an appropriation sponsored by the late Congressman John F. Baldwin. This project, described in House Document No. 208 of the 89th Congress, 1st Session, was authorized and approved by the Congress in September 1965. As a part of this project, the San Francisco Bay has been deepened from 50' to 55' and the main shipping channel into San Francisco Bay widened. Some minor additional construction was also provided near the Port of Richmond and on the levee system of the upper San Joaquin River.

In order to expedite work on portions of this overall project, the project has been divided into five phases or sections. Commencing at the entrance to San Francisco Bay, Phase 1, the widening and deepening of the San Francisco Bay to 55' has been completed.

Phase 2 consists of deepening the Southampton Shoals Channel from 35' to 45' for a distance of approximately three miles to connect the naturally deep waters of San Francisco Bay and West San Pablo Bay. The State of California, Congressman George Miller, the Contra Costa County Board of Supervisors and local interests all support this phase of the overall project. It will provide the vitally needed deeper channel for the Port of Richmond which has placed its first container berth in operation, provide a better approach to the Chevron, USA, Richmond Refinery wharf, and provide a needed deeper channel for the U.S. Naval Fuel Supply Depot at Point Molate, near Richmond, and the bulk liquid facilities of the Port of Richmond at Point San Pablo. The Corps of Engineers awarded an $8.3 million contract to commence construction of Phase 2 and the order to proceed was issued January 18, 1985. This phase will be completed in FY86.

Phases 3 and 4 consist of deepening the existing 36' channel through San Pablo Bay and the lower Suisun Bay 35' Channel to 45'. Corps model studies indicate that this phase will induce an increase in salinity levels in the Delta. Therefore, the Corps is conducting engineering and model studies on various types of underwater salinity barriers or sills in the Carquinez Strait to mitigate the effects of this phase.

Phase 5 consists of deepening the Stockton Channel and upper Suisun Bay Channel from the existing depth of 30' to 35' from Point Edith, upstream of Martinez, to the Port of Stockton. Construction commenced on this phase in October 1982, and will be completed this fiscal year.

The Economy

The San Francisco Bay is known throughout the world as one of the world's great harbors. In 1978, the latest year for which Corps of Engineers figures are available, some 56 million tons of cargo passed through the Golden Gate. Almost two-thirds of this total passed over the public and private docks of Contra Costa County and the Port of Benicia in adjacent Solano County via the existing John F. Baldwin Ship Channel.

All six of the petroleum refineries in Northern California, representing some 800,000 barrels per day of throughput, lie on this channel. Also on this channel is the world's largest sugar refinery, C&H at Crockett, importing almost 1 million tons of sugar each year, steel plants, chemical plants, paper mills, a gypsum plant, expanding general cargo facilities, and electric power generating plants of the Pacific Gas and Electric Company which are partially dependent upon shipment of fuel oil.

Also served by this channel are three important naval installations; the Naval Fuel Supply Depot at Point Molate, near Richmond; the U.S. Naval Shipyard (a Nuclear Submarine repair facility) at Mare Island, Vallejo; and the U.S. Naval Weapons Station at Concord which is shifting to containerization and which will require a deeper channel. The importance of a safe and adequate shipping channel to our Navy is obvious. It might be noted that the Corps does not include national defense installations in computing the cost-benefit ratio of projects.

Mr. Chairman, given the present balance of payment problems, it would seem obvious that everything possible should be done to reduce transportation costs, improve efficiency, and minimize environmental impacts.

In 1979, some 1,200 tankers entered San Francisco Bay. Over 250 of these vessels had a draft of 35' or more which is the present dock side depth of all of the petroleum refineries and terminals on the channel. These vessels have to anchor in South San Francisco Bay and have a portion of their cargo lightered off before they can proceed partially loaded to the refinery or terminal docks. This is an environmentally unsound practice, since it is known that the greatest risk of oil spillage occurs when it is necessary to transfer cargo. A deepening of the channel would enable these ships to proceed directly to their docks, thereby reducing time and transportation costs and reducing environmental hazard.

Conclusion

Mr. Chairman, the long-range viability of the San Francisco Bay Area regional economy is dependent upon the completion of this project. The last significant improvements to this main shipping channel were completed in the 1930's. The world shipping fleet has changed dramatically since that time. The ships are much larger in every respect and unless this channel is improved, the region cannot remain competitive to the detriment of our nation. Given the importance of international trade, the balance of payments and the very large sums collected in customs receipts by the San Francisco District each year, true national interests are involved.

We request the Committee to appropriate the amount of $5,000,000 to enable this project to proceed expeditiously.

Mr. Chairman, we thank the Committee for its attention to our concerns. Thank you.

Mr. **Langner**. Mayor Sheila Lodge of the City of Santa Barbara.

Ms. **Lodge**. For over 50 years, the Corps of Engineers has helped keep our harbor open through essential dredging. We are a harbor of refuge, and we get over 1,000 boats, including a Coast Guard rescue and 150 commercial fishing boats.

$800,000 is in the President's proposed budget for dredging. I urge your approval of this appropriation and, in addition, ask for $220,000 to reopen a Corps study on harbor preservation as earlier requested by Congressman Lagomarsino this morning. We allocated $100,000 for this study, which could lead to reduced Federal costs in the future.

Thank you very much for your consideration and support.

[The statement of Ms. Lodge follows:]

CITY OF SANTA BARBARA

SHEILA LODGE
Mayor

CITY HALL
DE LA GUERRA PLAZA
P.O. DRAWER P-P
SANTA BARBARA, CALIFORNIA 93102
TELEPHONE (805) 963-0611 EXT. 201

April 11, 1986

Representative Tom Bevill, Chairman
Subcommittee on Energy and Water Development
Rayburn Office Bldg., Room 2362
Washington, D.C. 20515

Dear Congressman Bevill:

RE: SANTA BARBARA HARBOR DREDGING FUNDS and SANTA BARBARA HARBOR STUDY

The harbor in the City of Santa Barbara is a regional harbor providing berthing for over 1,000 boats and is the only harbor of refuge on the central coast of California. It is home base for a U. S. Coast Guard search and rescue ship and is a significant port for the landing of the commercial fishing catch from the Santa Barbara Channel.

The Federal Government has recognized the regional aspect of the harbor for many decades. Sand movement down the coast has been a recurring problem since the harbor was started in 1925. Each year an average of 344,000 cubic yards of sand move into the harbor entrance and each year we move it out to continue its migration to the beaches south of Santa Barbara.

Since the 1930's, the Corps of Engineers has participated to some extent in the dredging problem. For many years this amounted to an annual fixed share in the dredging costs. In the early 1970's, the Corps was given the primary task of dredging the harbor channel and has continued this responsibility to date. Funds are contained in the Corps' proposed budget for this essential purpose.

In addition to dredging, the harbor is subject to extreme buffeting by major storms. The 100-year storm of 1983 caused more than $3,000,000 damage to the harbor and nearby public waterfront facilities. We, the City, have raised the monies necessary to rebuild and to enhance storm protection. $1 million was spent on a small breakwater extension alone.

We desperately need a long-term solution to the harbor problem. It may be that the only feasible solution is continuation of maintenance dredging. Another solution may be construction of major offshore protective devices. The only way to determine the best method is by a study by the Corps of Engineers, and the first step is to direct the Corps to do a feasibility study. We have demonstrated our concern and the seriousness of this issue by committing $100,000 for any cost sharing deemed appropriate.

Please take that first step and direct the Corps of Engineers to make a feasibility study for the protection and improvement of the Santa Barbara Harbor.

Sincerely,

Sheila Lodge

Sheila Lodge
Mayor

cc: Los Angeles District Engineer

Mr. **Langner**. The City of San Rafael, represented by a new member for his first appearance before this committee, Dave Bernardi, Director of Public Works.

Mr. **Bernardi**. Mr. Chairman, members of the committee, when the City Council learned from Congresswoman Boxer's office that the second half of the dredging project was not in the President's budget, they authorized me to appear before you personally to ask for your favorable consideration.

The written information I have submitted to you for the record is an expansion of Congresswoman Boxer's comments earlier this morning regarding the commercial use of the canal.

So, for the City Council, I request favorable consideration of the project.

[The statement of Mr. Bernardi follows:]

CITY
OF
SAN RAFAEL

1400 FIFTH AVENUE, P O BOX 60 SAN RAFAEL
CALIFORNIA 94915-0060

MAYOR
LAWRENCE E MULRYAN

COUNCIL MEMBERS
DOROTHY L BREINER
GARY R FRUGOLI
RICHARD P NAVE
JERRY RUSSOM

April 16, 1986

PRESENTED TO: SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATION
2ND SESSION, NINETIETH CONGRESS

STATEMENT OF: DAVID M. BERNARDI, DIRECTOR OF PUBLIC WORKS
CITY OF SAN RAFAEL, CALIFORNIA

I wish to state for the record that the San Rafael Canal is utilized by a variety of commercial uses, namely:

1. Boat repair
2. Yacht brokering
3. Boat storage
4. Docking facilities (yacht harbors)
5. Commercial fishing
6. Commercial freight and passenger service

We have approximately 43 boat repair businesses that rely on the San Rafael Canal for their livelihood. They employ approximately 150 individuals. We have estimated that these employees generate approximately $3,120,000 in paid wages from the 43 boat repair contracts and are generally spent in San Rafael supporting our overall economy.

We have six yacht brokerage businesses adjacent to the San Rafael Canal. They employ approximately 17 employees. They have generated approximately $7 million in sales. This translates to $700,000 in brokerage fees and $42,000 in local sales tax revenue. The sales tax revenue is particularly important to San Rafael because approximately 51% of the City's operating budget is funded by City-wide sales tax revenue. Any decrease in this revenue could potentially affect our ability to deliver services.

We have three boat storage facilities adjacent to the San Rafael Canal. They store approximately 135 boats on lands adjacent to the Canal for a monthly fee of not less than $50 per boat per month. They employ approximately 10 individuals.

As a business enterprise, the four yacht harbors berth approximately 700 boats. They employ approximately 18 employees. The impact of this use is best seen in other areas of our community such as purchases of ships' chandleries, gas stations (for vehicles), supermarket purchases, fuel dock revenues, and so on.

Statement on San Rafael Canal Dredging
April 16, 1986
Page Two

There are four "for-hire" commercial fishing enterprises located in the Canal. These uses are seasonal depending upon which species is in season. Additionally, there is one firm that operates a commercial freight and passenger service in the Canal. We were not able to ascertain revenue amounts for these uses.

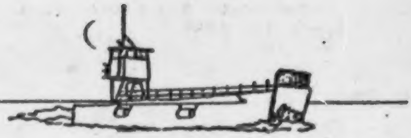
Lastly, the City operates a fire and rescue boat in the Canal and in portions of San Pablo Bay. Because the Coast Guard station at Point Richmond is so far away, we have, with concurrence of the Coast Guard, taken over rescue operations in our area. Needless to say, we will not be able to perform our rescue mission if the dredging is not accomplished. We have documented statistics that indicate our rescue operations have saved approximately $4 million in value for boats and have saved nearly 100 persons from possible drowning.

In summary, you can see that the use of the San Rafael Canal is much more than a recreational one. It supports a very healthy and thriving water oriented business community employing approximately 200 individuals and generating significant revenue for the City of San Rafael. I have attached some correspondence from businessmen adjacent to the Canal for your review.

The City Council of San Rafael, as well as the business people who rely on the San Rafael Canal for their livelihood, urgently request your consideration to appropriate the necessary funding to dredge the San Rafael Canal. If you need any additional information, we would be pleased to provide same.

Attachments.

Allied Marine Service, Inc.
269 3rd St., San Rafael, CA, 94901 • (415) 456-7886



December 19, 1984

Mr. David Bernardi
City of San Rafael
1400 Fifth Ave.
San Rafael, Ca. 94901

RECEIVED
DEC 24 1984
PUBLIC WORKS DEPT.
CITY OF SAN RAFAEL

Dear Mr. Bernardi,

Allied Marine Service operates a commercial freight and passenger vessel on San Francisco Bay.

Our base of operations is 269 Third St., San Rafael.

The "Allied Mariner" is 56' in length and has a draft of 6½' loaded. It is USCG certified for freight, passenger, towing and salvage service.

The present shallow depths encountered in the canal and the outer channel are becoming a real problem in our operations.

We hope that funding can be found for dredging in the near future so that we may remain in business in San Rafael.

Sincerely,

John G. ~~Moore~~
John G. Moore
V-Pres - Treas.

JGM/rmh

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File Ref: 04.04.02.02

MARIN YACHT SALES, INC.

LICENSED YACHT BROKER
YACHT SALES & FINANCING

LOWRIE YACHT HARBOR
40 Pt. San Pedro Road
San Rafael, Calif. 94901
Phone: (415) 454-7595

RECEIVED
DEC 24 1984
PUBLIC WORKS DEPT.
CITY OF SAN RAFAEL

December 20, 1984

Mr. David M. Bernardi
Director of Public Works
City Engineer
City of San Rafael
1400 Fifth Ave., P. O. Box 60
San Rafael, CA 94915-0060

Dear Dave:

I feel the meeting of December 19, 1984 at Pier 15 with Congresswoman Barbara Boxer and the Army Engineers to discuss dredging of the San Rafael Canal went very well. I want to thank you for your help.

Also, it was encouraging to see so many of the local business people there who depend on the San Rafael Canal for the survival of their business.

As you know, I have owned and operated Lowrie Yacht Harbor, Inc. for over thirty years and in that period of time we have dredged our Marina four times. We are in the same position as many businesses along the San Rafael Canal. The survival of our businesses depends on the continued maintenance dredging of the Canal.

Your continued assistance in this direction will be greatly appreciated.

Sincerely,

B R Lowrie

B. R. LOWRIE
PRESIDENT

BRL:rme

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		Park Supt.		

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File Code: 04.04.02.02

Marine Engineering Associates Inc.
269 THIRD STREET SAN RAFAEL, CA 94901
PHONE 456-7886

December 19, 1984

Mr. David Bernardi
City of San Rafael
1400 Fifth Ave.
San Rafael, Ca. 94901

RECEIVED
DEC 24 1984
PUBLIC WORKS DEPT.
CITY OF SAN RAFAEL

Dear Mr. Bernardi,

Marine Engineering Associates has been on the San Rafael Canal for over twenty one years.

We have a 280' floating dock on the canal behind Monticeto Shopping Center where we do mechanical and electrical repairs on pleasure, commercial and government craft up to 90' in length and 10' in draft.

We are also involved in commercial towing and salvage.

We have seven fulltime employees with a payroll of $170,000. and gross sales of $600,000.

The rapidly deteriorating water depth is of great concern to us in our ability to continue servicing our customers boats at our dock.

We hope that means can be found to get a dredging project underway as soon as possible.

Sincerely,

John G. Moore
V-Pres - Treas.

JGM/rmh

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File Refr C4.C4.02.02

SAN RAFAEL YACHT HARBOR
557 FRANCISCO BLVD.
P.O. BOX 3477
SAN RAFAEL, CA 94902

12/28

RECEIVED
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CITY OF SAN RAFAEL

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File Ref: 01.05.17
01.05.18

Mr. Robert Bernardi
City Engineer
1400 5th Street
San Rafael, CA

Dear Mr. Bernardi,

As the operator of the San Rafael Yacht Harbor which offers berthing to one hundred and forty boats near the center of the city, I want to register my concern for the silting-in of the San Rafael Canal since the last dredging was completed.

I feel that the two very severe winters that followed that dredging contributed considerably to the siltation problem. I have been in business on the canal since 1947 and it has been my observation that the years with the greatest rain fall are soon followed by complaints of boat-owners who find themselves aground at average low tides. We seem to have definately reached the situation again. It is time to set the wheels in motion again so that the U.S. Army Corps. can commence their regular maintenance (dredging) program.

Since the Grand Street bridge was contructed, dredging west of this street was no longer practical from the standpoint of a suction dredge. It is very noticeable, since that time, that the first area to shoal after a dredging is the first half-mile of the canal east of the Grand Street bridge.

The next areas to shoal are the entrance to the Marin Yacht Club and to the LochLomond Marina. The shoaling in these last two areas is caused by poor hydraulics, not enough flushing action due to two dead-ended bodies of water. I feel the shoaling at the head waters of the canal is partly due to it being the end of the canal but is mostly due to run-off from the greater San Rafael area.

I would like to suggest that before any more building is done between Grand Street bridge and Irwin Street bridge, that this area of the canal be dredged to at least six feet below low water by use of a truck crane. This would create a sump capable of slowing some of the sediment from winter storms before it begins to shoal the commercially usable upper section of the canal.

Sincerely yours

W C Garvie
W.C. Garvie...Harbormaster

T.L. NEWS
POINTER
5/9/84

Congresswoman Boxer Helps City of San Rafael

Congresswoman Barbara Boxer has taken steps to help the City of San Rafael secure long-term use of the Coast Guard rescue and patrol boat now on loan to the city.

During the past ten years, the San Rafael Police Department has operated a marine safety, enforcement, and search and rescue program in the San Rafael and San Pablo Bay areas. The utility boat, "Mission City," was loaned by the Coast Guard to San Rafael after the city's 22-foot Radon boat, purchased with federal funds appropriated under the Federal Boat Safety Act of 1971, was destroyed by a 1982 fire.

In a letter sent this month to Admiral James S. Gracey, Commandent, U.S. Coast Guard, Washington, D.C., Boxer stated, "The use of this small utility boat enables the City of San Rafael to provide critically needed emergency rescue services in a portion of the Bay which is not quickly reachable by Coast Guard vessels stationed at Mare Island or Yerba Buena Island.

"During just the past two years, use of the surplus Coast Guard boat allowed San Rafael rescue teams to prevent destruction of an estimated $4 million worth of boats and the possible drowning of nearly 100 persons.

"The Coast Guard is about to lose this local component of Bay Area rescue and patrol operations through its decision to remove this boat from Coast Guard inventory and release it under the standard GSA surplus property disposition process. If this happens, the City of San Rafael will probably have no opportunity to acquire the boat."

Boxer asked Admiral Gracey to support a longterm lease/loan arrangement which would "make it possible to continue this extremely beneficial marine safety, rescue and patrol operation by the City of San Rafael."

In a cover letter to San Rafael Police Chief Henry (Hank) W. Ingwersen, who administers the marine safety program, Congresswoman Boxer said, "I am so impressed by the outstanding service which San Rafael's active and effective operation provides to the boating community, and it offers a tremendous workload reduction for the Coast Guard as well. A very important federal purpose is being served in a cost-effective way through San Rafael's use of this surplus Coast Guard utility boat. I am pleased to be able to help San Rafael in this way."

Mr. **Langner**. We have with us a number of others today: the County of Orange, represented by Carl Nelson, Director of Public Works; San Mateo County, Jean Flocks; Ventura Port District, represented by Richard Parsons, General Manager and Treasurer of CMANC; Port of Sacramento, John Christian, also had a statement to submit; along with Jerry Pope, Director of Administrative Services of the Port of Oakland submitting a statement.

Port of Los Angeles has a large delegation here: Jim Seeley submitting a statement, Washington representative; Joe Zazinovich, Commission Chairman; Earl Clark, Director of Construction Management; Chuck Gibson, Commissioner; Don Mosman, Commissioner; and Councilman John Ferraro.

Los Angeles County, Ted Reed, Director, Department of Beaches and Harbors, is submitting a statement.

We also have Humboldt Bay Harbor Recreation District, with Jack Alderson, Bob Davenport, Commissioner, and Jerry Scott; Port of Redwood City, which has Fred DiPietro, Robert Spillers, Walter Small, Commissioners; Les Westfall, whom many of you know well, President of Westfall Stevedore Company, Eureka; Ken Johnson, CONMASS; Dick Millard; John Miles; and Michael Cheney.

That completes our testimony. It is a pleasure to be here.

[The statements follow:]

PORT OF OAKLAND

BOARD OF PORT COMMISSIONERS
CITY OF OAKLAND

DOUGLAS J. HIGGINS — President
G. WILLIAM HUNTER — 1st Vice President
HERBERT ENG — 2nd Vice President
SEYMOUR M. BACHMAN — Commissioner
H. WAYNE GOODROE — Commissioner
PATRICIA PINEDA — Commissioner
CHRISTINE SCOTLAN — Commissioner

WALTER ABERNATHY — Executive Director

STATEMENT BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

CONGRESSMAN TOM BEVILL, CHAIRMAN

Chairman Bevill and members of the committee. We appreciate the opportunity of appearing before you today in support of the California Marine Affairs and Navigation Conference recommendations concerning the Oakland Inner and Outer Harbor channels. Corps of Engineers estimated costs for these projects is $49,000,000. The fiscal year 1987 amount included in the President's budget is $2.5 million and an additional recommendation has been made increasing this amount to $3 million which will initiate construction of the combined project.

The proposed plan of improvements includes deepening of the Inner and Outer Harbor channels from the present MLLW depth of 35' to 42'. The plan of improvement will also include a 1,200' vessel turning circle as part of the Inner Harbor based on a designed ship of 960' in length. The plan of improvement also includes widening of the bar channel from 800' to 1,000'. The Port of Oakland will furnish all the necessary assurances and agreements to insure full implementation of the project.

Deepening of these channels will allow present and future generations of container ships unrestricted access to Inner and Outer Harbor terminals, and widening the bar channel will improve navigational safety. The Inner and Outer Harbor channel improvements will be a source of $1 billion in annual revenues to the region supporting more than 20,000 jobs. The channel improvements are the location of our major container handling facilities serving the newest ships that have been put in service by the containership lines serving the Port of Oakland. This class of ships requires the deeper drafts of the improved channels.

66 Jack London Square • P.O. Box 2064 • Oakland, California 94604 • Phone (415) 444-3188
Cable Address PORTOFOAK, Oakland • Telex 336-334
MEMBER OF THE AMERICAN ASSOCIATION OF PORT AUTHORITIES, INC., THE AIRPORT OPERATORS COUNCIL INTERNATIONAL, INC.
and THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

At the State level San Francisco Bay, consisting of the complex of port facilities with Oakland as the dominant port of the region, will serve the import and export requirements of not only the local area but into the hinterlands of the West coast and East Coast which will benefit from these improvements. Construction of the recommended 42' channel depths at Oakland will complete a vital link in this regional port system.

On the national level port facilities served by the Outer and Inner Harbor channel are vital for the U. S. role in world commerce and national defense. The projects will provide for improved navigation at the Oakland Naval Supply Center and to MOTBA North and MOTBA East. In case of a national emergency the commercial port facilities along the Outer and Inner Harbor channels will be counted on as a vital part of the nation's defense capabilities.

On behalf of the Board of Port Commissioners and the staff of the Port of Oakland, please accept our sincere appreciation for the work that has been done by this committee. As previously stated we support the C-MANC recommendations and are looking forward to a construction start in 1987. In closing, we would also like to extend our appreciation to the Corps of Engineers who have contributed so much toward the studies that eventually led to authorization of these projects. We will look forward to continued cooperation with this committee and to the Corps as the work progresses.

Respectfully submitted,

Walter A. Abernathy
Executive Director

VENTURA HARBOR

TESTIMONY
of the
VENTURA PORT DISTRICT
Before The
SUBCOMMITTEE ON ENERGY & WATER DEVELOPMENT
COMMITTEE ON APPROPRIATION
SECOND SESSION - 99TH CONGRESS
April 16, 1986

Ventura Harbor is located along the Southern California coastline in the City of San Buenaventura, some 30 miles downcoast from Santa Barbara, and approximately 60 miles northwest of the City of Los Angeles. Ventura Harbor became operational in 1963, and it soon became evident that the Harbor was plagued with a serious entrance problem. In May 1968, the Ventura Harbor became a Federally approved project committing the U. S. Army Corps of Engineers to provide maintenance dredging and a solution to the entrance problem. A detached breakwater and sand trap area completed by the Corps of Engineers in 1972 alleviated some of the more damaging difficulties but continuing navigational problems persisted. Additionally, the need for annual maintenance dredging continued, and the Corps of Engineers and the Ventura Port District have conducted maintenance dredging of the Harbor entrance within the limits of their jurisdiction from 1968 through the present time.

In recent years an aggressive development program has resulted in many new facilities, and others that are either under construction or are scheduled for start in the very near future. These include an extensive commercial facility, primarily oriented to the commercial fishing industry and the servicing of the offshore oil industry. The total investment for these improvements is approximately $30 million, with $1,300,000 being funded by the Economic Development Agency. In addition, the headquarters for the Channel Islands National Park has been completed, and large numbers of the public are enjoying the displays and programs of the National Park Service. A 225 room resort hotel complex was completed in 1984 at a cost of approximately $27 million, and a second 300 room to 450 room hotel and conference center will begin construction within twelve months.

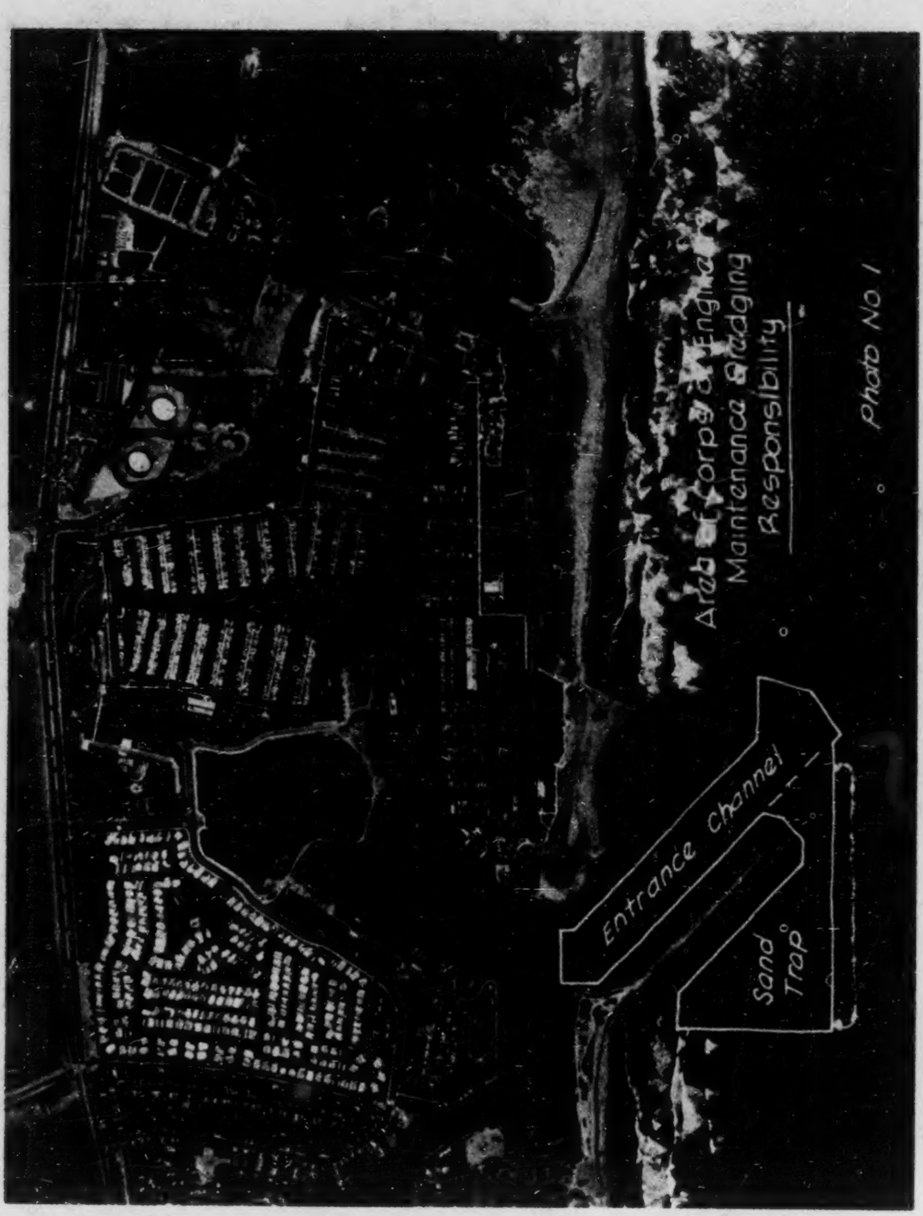
I

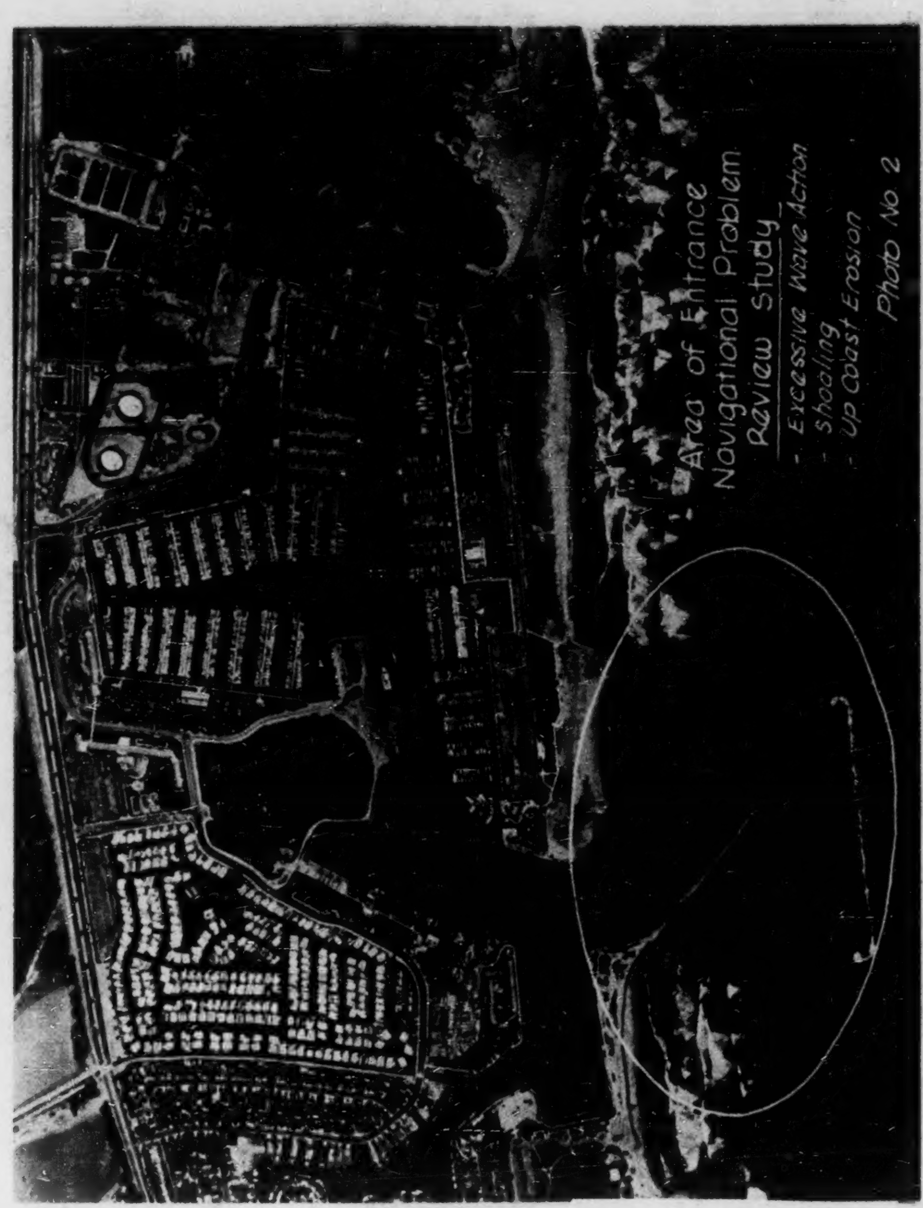
All of the operations of the Harbor, particularly those related to commercial fishing and the support boats for the oil industry, are highly dependent upon a navigationally adequate entrance to the Harbor. It is therefore respectfully requested that the Congress support the Army Corps of Engineers FY87 Civil Works Budget request of $1,690,000 for the maintenance dredging of the Ventura Harbor entrance channel. The area of Corps of Engineers responsibility is illustrated in Photo No. 1.

II

The U. S. Army Corps of Engineers is presently completing the reconnaissance phase of an authorized review study of the continuing navigational problems associated with the Ventura Harbor entrance. Photo No. 2 illustrates the study area. The design deficiencies associated with the existing federal improvements at the Harbor entrance result in the periodic shoaling of the entrance channel which can in extreme instances lead to the complete closure of the Harbor, but much more regularly causes the development of dangerous wave conditions during the winter storm months. This situation is a hazard to navigation which limits Harbor growth and development, reduces commerce, increases maintenance costs, and disrupts the local environment.

The Army Corps of Engineers FY87 Civil Works Budget Request includes $175,000 for the continuation of the feasibility phase of this ongoing navigation study. The Ventura Port District is of course pleased that the Corps of Engineers is committed to moving forward with identifying the remedial measures necessary to correct the navigational problems associated with the federal improvements at the Harbor entrance. However, the Port District's financial participation in the cost of the feasibility study would be a severe hardship in view of the District's limited monetary resources and would be inappropriate since the study is necessitated by the design deficiencies associated with the 1972 federal improvements. It is therefore requested that the Congress eliminate the provision for local cost participation and include sufficient monies in the Corps of Engineers FY87 Civil Works Budget to continue the feasibility phase of the ongoing Ventura Harbor Entrance Channel Navigation Study.


Area of Corps of Engineers
Maintenance Dredging
Responsibility
Photo No 1
Entrance Channel
Sand Trap



Area of Entrance
Navigational Problem
Review Study
- Excessive Wave Action
- Shoaling
- Up Coast Erosion

Photo No 2

COUNTY OF LOS ANGELES
DEPARTMENT OF BEACHES AND HARBORS

April 4, 1986

TED REED
DIRECTOR
ERIC BOURDON
ASSISTANT DIRECTOR
STAN WISNIEWSKI
DEPUTY DIRECTOR

Honorable Tom Bevill, Chairman
Energy and Water Development Subcommittee
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Bevill:

SUBJECT: LOS ANGELES COUNTY SHORELINE EROSION CONTROL AND NAVIGATIONAL PROJECTS AND STUDIES

The Board of Supervisors of the County of Los Angeles respectfully requests the serious consideration of the Congress of the United States for several projects urgently required to preserve and restore a vital and precious asset, the 75 mile shoreline of Los Angeles County.

During the winter storms of 1983 a combination of unusually high tides and strong winds caused extensive damage to the Los Angeles County coast. In the past three years the County has worked diligently to restore our beaches to their pre-storm condition.

While the beaches may appear to be significantly restored, they continue to be extremely vulnerable to future storms. Healthy beaches are necessary, natural buffers to protect public facilities from the unpredictable forces of the ocean. Because Los Angeles County has one of the most heavily urbanized and developed shorelines in the country, it is extremely important to fund and complete the studies requested below in order to help prevent future damage to heavy public investments in shoreline facilities.

For several years we have also requested funding for continuation of a federal survey of the North Coast of Los Angeles County to determine feasible sites for construction of small craft berthing facilities and harbors of refuge. A major urban development adjacent to the federal channel in Marina del Rey has been approved in the local coastal zone management plan, thus giving this study a high priority.

13837 FIJI WAY, MARINA DEL REY, CALIFORNIA 90292 (213) 823-4571/870-6782

California Storm and Tidal Wave Study (Approximate cost: $1,500,000)

The California Storm and Tidal Wave Study is presently examining the coast from the Mexican border north to Malibu in Los Angeles County to document changes in the shoreline and compile a technical data base quantifying these changes. This data base will provide information necessary for decisions regarding the restoration and maintenance of the shoreline.

Funding should be increased to $1,500,000 in fiscal year 1987 to accelerate data collection analysis and findings from the U.S. Army Corps of Engineers.

North Coast of Los Angeles County Navigational Survey and Study (Approximate cost: $250,000)

Every year there is a growing demand for small craft harbor facilities in the United States, and nowhere is the demand more acute than in the Los Angeles metropolitan area.

The Marina del Rey Small Craft Harbor, a joint Federal/County project, has been greatly successful since its inception. Over $4.6 million has been expended by the Federal government since the project was first authorized in 1954. Matching funds from the State and County have topped $19 million, and the private sector has invested over $175 million in a great variety of public facilities. Both government agencies and the private sector alike have realized a substantial financial return from Marina del Rey.

A recently approved Coastal Zone Management Plan has identified a site adjacent to the Marina del Rey Small Craft Harbor for a new boat basin connecting with the existing navigation channel. A navigation study costing $250,000 is urgently needed for this area which is possibly the last significant opportunity to provide small craft facilities on the Los Angeles County coast.

Point Mugu to San Pedro Breakwater (Approximate cost: $300,000)

Unusually strong winter storms in 1982-83 caused extensive damage to the Los Angeles County shoreline. The normal storm track was altered by the effects of the El Nino phenomena and many strong storms directly hit the California coast. These storms coupled with unusually high tides caused widespread damage to beaches and shoreline facilities estimated at over $19 million.

While much of the sand has returned to the County's beaches, they remain vulnerable to future storms without proper shore protection. This feasibility study should be funded in order to help determine the most effective methods of shoreline protection at those points within the Santa Monica Bay and San Pedro compartments which are most vulnerable to future storm attack.

Additionally, the City of Santa Monica has created a Santa Monica Pier Restoration Corporation to formulate plans for the restoration of their famous pier, severely damaged in the 1982-83 storms. An important part of the pier redevelopment involves the reestablishment of a breakwater. Therefore, the City of Santa Monica is interested in having the Corps of Engineers study the feasibility of rebuilding the breakwater, which could protect the new pier. Inclusion of this project may increase cost of the study in future years.

Marina del Rey Channel Dredging (Approximate cost: $1,175,000)

This project is needed to provide for continued safe navigation in the Marina del Rey entrance channel. Sand deposits or shoaling are continually reducing the width of the boating lanes in the entrance channel, and sand deposits will eventually result in the harbor entrance being blocked.

Every year there are growing demands and shrinking resources, making the allocation of these resources a difficult task. I trust your Committee will recognize the high priority associated with the projects discussed in this letter to protect major public and private shoreline facilities and developments.

Very truly yours,

T. J. Reed

Ted Reed, Director

TR:LHC:cr

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

STATEMENT OF MELVIN SHORE
PORT DIRECTOR, PORT OF SACRAMENTO

April, 1986

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

Summary of Request

Thank you, Mr. Chairman and members of the Subcommittee, for this opportunity to present testimony on behalf of the Sacramento River Deep Water Ship Channel deepening project.

The deepening of the Sacramento River Deep Water Ship Channel, following seventeen (17) years of study and review by the Corps of Engineers, is more than ready for the commencement of construction. Accordingly, we ask that your Honorable Committee include an item of $3.6 million to allow the Corps to begin construction. We have been negotiating a Local Cooperation Agreement with the Corps of Engineers based on project cost-sharing. We expect to have the Agreement executed prior to June 30, 1986. On the basis of last year's Supplemental Appropriations Funding bill, the Corps expects to move ahead on construction this year.

EXPECTATIONS EXCEEDED

When the Corps of Engineers studied the project (which ultimately led to the creation of the current channel and harbor) in 1955, they concluded that the project would be economically viable if on the average it handled 857,000 tons per year over the 50 year economic life. In our twentieth year (1983) the 30 millionth ton of cargo moved across the docks. By the Corps' projections, that should not have occurred until 1998. The level of cargo moving across the docks has reached as much as 3.25 million tons in one year. That level of activity should have occurred in the year 2060, by the Corps' projections. Thus by any measuring stick, the Port has proven its worth.

NEED FOR DEEPER WATER

The bulk cargoes presently moving through the Port sorely require deeper water. Bulk cargoes require larger vessels to minimize the per-ton cost for ocean freight. To continue to successfully compete in the world markets, the Port's shippers must be able to charter larger vessels with deeper drafts. To do any less makes them non-competitive and destroys their ability to foster our country's exports.

Just two of the Port's cargoes will serve to demonstrate the need. Last year the majority of the ships loading grain for export at Sacramento had to be topped-off at deeper water. When the Port started its woodchip export program in 1967, the ports at the receiving end had only 27 feet of draft capability. At that time Sacramento's 30 feet was ample. Now those same receiving ports offer 12 meters (over 39 feet) draft.

In both these cases, the long term picture can only mean that Sacramento will gradually be bypassed and eventually wither and die if depening is not accomplished. It should be pointed out that these exports contribute to helping solve the continuing United States balance of payments problem.

B. C. RATIO

The Corps' Feasibility Report shows that the deepening of the channel to Sacramento will produce a 2.0 benefit-cost ratio when evaluated at the interest rate of 8 1/8%. Typically, navigation projects have not shown well at these high interest rates which adversely affect the B/C ratio by tending to minimize annual benefits and exaggerate annual costs.

ADDITIONAL VALUES

Deepening the channel will also serve the energy conservation needs of the country. When ships can be fully loaded at the Port, it will avoid the need to move cargoes to more distant ports by land transportation means. It is even more dramatically evident now in the 1980's that water transport is many times more fuel-efficient per ton of cargo than land transportation. The needs of national defense will also be better served by making the Port more accessible to naval and merchant marine vessels that require the deeper draft.

SUMMARY

I wish to thank you, Mr. Chairman and your Subcommittee, both for hearing this testimony and for your considerable past help in including and augmenting appropriations for the Sacramento River Deep Water Ship Channel deepening project. Should the water project omnibus bill passed by both the House and the Senate become law, as we expect it will, our project will have no obstacles remaining to eventual successful completion. I urge that you include an item of $3.6 million to help ensure an early and economical completion.

CITY OF OCEANSIDE

DEPUTY MAYOR
DR. JOHN MACDONALD

MAYOR
LARRY M. BAGLEY

COUNCIL MEMBERS
WALTER A. GILBERT
TED MARIONCELLI
SAM WILLIAMSON

TESTIMONY TO THE HOUSE ENERGY & WATER DEVELOPMENT SUBCOMMITTEE

SAN LUIS REY RIVER FLOOD CONTROL PROJECT
OCEANSIDE, CALIFORNIA
APRIL 16, 1986

Honorable Members of the Subcommittee:

As I have in previous years, I am here to ask your support for $1.5 million in the FY 87 budget for the San Luis Rey River Flood Control Project. This project is urgently needed to provide protection to over 4,000 dwellings and 59 businesses located within the floodplain.

The City of Oceanside has already commenced construction of this vital project by building $0.5 million in flood control improvements at the easterly end of the project under a Section 215 Agreement with the Federal government. The proposed $1.5 million in new construction funding would allow completion of the project reach from the Ocean to I-5, and preparation of plans and specifications for the subsequent construction reach.

Oceanside has suffered substantial flood damage in recent years from relatively small floods along the San Luis Rey River. The

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Corps of Engineers predicts that a major storm would cause over $100 million in damage. Delays in construction funding not only escaldte project costs, but they also increase the risk of further costly flood damage.

The Corps of Engineers' proposed single levee flood control design was unanimously approved by the Oceanside City Council and is strongly endorsed by neighborhood associations. The Los Angeles District Corps of Engineers as recently as February, 1986, has verified that the adopted plan is the only economically and environmentally sound alternative for providing flood protection in the area.

On behalf of the City of Oceanside, I would like to respectfully request that the Subcommittee include $1.5 million for the San Luis Rey River Flood Control Project in your FY 87 Energy and Water Development Appropriation Bill.

Larry M. Bagley

LARRY M. BAGLEY
Mayor

STATEMENT

BY

EZUNIAL BURTS, EXECUTIVE DIRECTOR

PORT OF LOS ANGELES

HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

April 16, 1986

Mr. Chairman, I would like to submit a statement which outlines why it is important that the federal government continue to support and to fund two Army Corps of Engineers studies which are essential to the future development of the San Pedro Bay and to the Ports of Los Angeles and Long Beach.

In last year's Appropriations bill (P.L. 99-141), Congress generously included $1.268 million for the "Tidal and Resonance Study" to be undertaken in conjunction with the Corps' Vicksburg Model. In addition, $500,000 was appropriated for the continued work on phase one of the "2020 Master Plan".

Since the date of enactment, however, none of the funds have been released and consequently the scheduled work on the two studies have not yet begun. This delay is unfortunate, Mr. Chairman, for several reasons which I would like to outline for the Subcommittee.

First, is the relevance of the completion of phase one of the study to the preparation and approval of the Chief's Report on the channel deepening project which is included in H.R. 6, the Water Resources Development Act of 1986. In fact, there will not be a Chief's Report unless and until the feasibility study for phase one has been completed, and if the Senate and the Administration have their way, the San Pedro Bay project will not be authorized until this this report is completed and submitted to Congress. Obviously then, it is essential that the $500,000 your Subcommittee earmarked last year be used for the purpose it was intended and that the work begin immediately. The first phase of the "2020 Master Plan" study project is going to involve dredging to deepen and create channels and disposal of material in landfill areas. Again, the potential effects which need to be addressed are water quality and ship motion.

It seems to me, Mr. Chairman, that it is blatantly unfair and certainly non-productive for the Administration to drag its heels on the two studies in question, and I urge your Subcommittee to direct the Corps of Engineers to carry out its intent.

Looking ahead to our needs in FY 87, we need $500,000 in additional funding to complete the phase one feasibility study which is a part of the "2020 Master Plan" study. Last year before your Subcommittee, we requested $1 million and, having been granted one-half that amount, we are back this year asking that the final amount be appropriated as part of the FY 87 budget.

With regard to the FY 87 funding of the "Tidal and Resonance Study", our request is for an additional $1.3 million, of which $140,000 is included in the President's budget under operation and maintenance for the Vicksburg Model. This amount is consistent with the amount of work that can be productively accomplished at the Vicksburg Model on an annual basis. The Vicksburg Model, which is producing data that is vital to the assessment of the impact and desirability of future dredging and landfills, will permit an evaluation of the soundness of proposed harbor changes that influence tidal circulation and harbor resonance.

The study will also provide a sound data base and improve our understanding of the magnitude, source, and effect of wave energy on ship mooring at any selected location. It will enable us to firmly identify directions, velocities, and wind effects on patterns of natural circulations influenced by tidal action. This data will improve our ability to plan and implement major harbor development projects.

At the present time, our information on existing circulation and surge conditions and the effects of wind and tide thereon in the harbor is incomplete and inconclusive. Without it, there is a very real danger that a well-planned and well-intentioned project that alters the bottom configuration could disrupt circulation patterns and create unexpected problems elsewhere in the harbor. This study will furnish vital information to help us avoid such problems---if it is funded to completion.

As a matter of fact, the Army Corps of Engineers has the responsibility to provide this basic data on harbor conditions when we submit proposals for site-specific projects. However, their data base on our local waters is incomplete, and they do not now have adequate information on harbor conditions to properly evaluate our long-range development program. The Port of Los Angeles is investing approximately $100 million per year from its own revenues in its Five-Year Development Program. Therefore, your approval of this appropriation is extremely important to the financial planning of our harbor.

We at the Port of Los Angeles are doing all we can to meet the growing demands of international trade. We project that our volume of trade will expand tremendously in the next ten years. However, unless we are able to lay the groundwork for fundamental expansion of our port during this same period of time we will have reached our capacity and cease to grow.

Mr. Chairman, let me conclude by saying how much we value the vision which this committee has demonstrated in allocating scarce federal resources to projects such as ours. For our part, we view our commitment to the expansion of water-borne transportation as a service to the Nation as much as it is to our region. We enjoy the opportunity of working with you in carrying out this charge and of putting our local resources to productive use. Thank you.

Mr. **Bevill**. Very good.

I notice you overlooked the most important person here, Mrs. Bob Langner.

Please stand up. We are pleased to have you with us.

Mr. **Myers**. Don't you have someone else with you, too, Bob?

Mr. **Langner**. You mean from the family?

This is the first year we didn't bring the family with us. They grow up on you, John.

Mr. **Bevill**. Bob, we appreciate the fine job you did in presenting your testimony, and for expediting this.

Mrs. **Boggs**. I have a daughter who lives out there. I am pleased that you are represented here.

Mr. **Bevill**. We do appreciate your being here.

Mrs. Boggs gets so many international awards, I can't keep up with her. She always asks these witnesses how many—in the departments of government, when you are testifying—how many women do you have on your payroll? She has asked that so much I have started asking them how many men they have.

We appreciate all of you coming.

We will stand adjourned until 2 o'clock this afternoon.

Written Testimony for Hearing Scheduled
April 16th, 1986
ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS

The Testimony I presented on March 28th, 1985, still supports all the arguements why there should not be any funding by Congress for the San Luis Rey River project. In addition, the following has taken place to strengthen the above reasons for no funding:

1. Property owners, Messers. Abell and Abondonado have constructed an additional 600 ft. of rip-rap levee on their property.

2. DRED (Deutsch Real Estate Development) have been reinforcing their revetment and are raising it from a 50-year to a 100-year flood control. Since starting the work 3 weeks ago, at least 1500 ft. has been completed to date on the North side, out of a total of 3400 ft. When finished, the contractor will move to the South side of the River and do a like amount. Besides this permits are in process which will create another 6200 ft of levees and revetments.

What we need is cooperation from the City of Oceanside and Corps of Engineers and this job will be done by the private property owners with very little cost to the taxpayers.

On June 12th, 1986, the Deutsch interest and other property owners are making a presentation to the Corps of Engineers, at which time we will invite members of Congress, Oceanside City officials and hopefully a representative of the Governor of California. Said presentation will show how a double levee 100-year flood control for the 7.2 miles of the San Luis Rey River can be accomplished for under $5 million.

Just in case you do not want to read last years presentation, we still state that the City of Oceanside asking for $1,400,000 is unnecessary since that particular area is already finished for 100-year flood control.

Respectfully,

Alex Deutsch

Alex Deutsch
Board Chairman, Deutsch
Municipal Airport
Oceanside, CA 92054

Written Testimony for Hearing Scheduled
March 28, 1985
ENERGY AND WATER DEVELOPMENT SUBCOMMITEE ON APPROPRIATIONS

Subject:

$1,400,000 request in the budget for Congressionally Approved San Luis Rey River project sponsored by the City of Oceanside and designed by the Corps of Engineers.

Purpose 1) To advise this Committee not to approve this request since the money spent would be totally wasted.

2) To plead with this Committee to send the San Luis Rey River project back to the Public Works Committee of the House for re-examination and evaluation.

SUMMARY OF REQUEST

Page 2 - Short presentation showing why the $1,400,000 request is unnecessary.

Page 3 - Corps of Engineers cost breakdown showing where the money can be saved using the Corps figures.

Page 4 - Complications, miscalculations, mistakes by the Corps of Engineers and the environmentalists.

Page 5 - Summary of reasons for requesting Appropriation Committee to recommend return to Public Works Committee.

Please Note:

CAP = Congressionally Authorized Plan designed by the Corps of Engineers as a double levee channel requiring 420 acres - and approved by Congress in 1970, estimated cost $9,720,000.

SLP = Single Levee Plan designed by the Corps of Engineers, after 1978 similar to the Congressionally Authorized Plan except 3½ miles of levee is removed on the north side, and now requires 935 or 515 more acres than the original Corps plan, estimated cost $45,000,000.

ALEX DEUTSCH
Board Chairman, Deutsch
Municipal Airport
Oceanside, CA 92054

This request for $1,400,000 is $500,000 higher than last years $900,000 request. The money is supposed to cover the cost of improving the revetments presently exisiting between Interstate 5 and the ocean - the present construction is beyond 100 year flood control requirement.

I would like to quote from the Corps authorizing document of April 3, 1970 presented to Congress by Colonel Norman E. Pehrson, CE, District Engineer, and accepted by John A. B. Dillard, Brigadier General, U.S. Army Division Engineer:

Page 33,"65. San Luis Rey River channel improvement (recommended plan). -- The recommended channel improvement, which would be approximately 7.2 miles long, would include (a) an earth-bottom trapezoidal channel about 5.7 miles long from Murray Road to about 1 mile upstream from U.S. Highway No. 101; (b) about 1.5 miles of channel grading, which in general would be limited to the removal of spoil banks, from 1 mile upstream of U.S. Highway No. 101, through the "narrows" section, to the ocean; and (c) about 800 feet of stone-revetted levee on the left (south) bank from the railroad to the ocean."

Please note the 800 foot levee for the south side requested by Colonel Pehrson was built by the property owners in 1978 and is in place. Colonel Pehrson also recommends to leave the north side levee alone because it is satisfactory.

Page 34,"68. Downstream from the Santa Fe railroad, a stone-revetted levee to contain the standard project flood would be constructed on the south bank to protect about 7.5 acres of potentially high-value land. The existing stone levee on the right bank protecting the small-craft harbor, which would control a flow of 60,000 cubic feet per second, would not be modified although it would be overtopped by a standard project flood. Raising the right levee would require complete reconstruction which is not warranted by the relatively low average annual damages in the harbor area that could result from floods with peaks larger that 60,000 cubic feet per second. Studies also showed that the construction of the left-bank levee would not adversely affect the existing right-bank levee to an appreciable degree. The existing lagoon within this reach would not be disturbed."

The two above quotations taken from the Corps publication to Congress clearly shows no need for any more work in this area.

The channel between Interstate 5 and the ocean is over 550 feet wide at the narrowest point, much wider than required for a 100 year flood - add all this together other than clearing the river, there is not any need for wasting taxpayers money - the job has been finished.

We have been claiming for a long time that the cost of construction of the San Luis Rey River channel protection should not total more than $5,000,000. The Corps now tells us that the estimate of the total cost, including land will be approximately $45,000,000. I would like to explain how this reduction can come about by giving you some samples of savings. Let me explain first some of the circumstances:

1. The Corps is estimating a project flood control (250 - 500 years), in the State of California, San Diego County, 100-year flood control is sufficient. The Corps made an estimate and said they could save $2,000,000 in construction costs using 100-year flood control but they could not meet the Benefit Cost Ratio. In our opinion they cannot meet the BCR in either case. It seems ridiculous that the Corps has to go to a higher price in order to pass the BCR.

2. The excellent Congressionally Authorized Plan by the Corps required 420 acres. The ridiculous Single Levee Plan currently pushed by the Corps requires over 920 acres with 3½ miles less shore protection. The extra 500 acres outside of the CAP river area, using the price the City just paid for ten acres, at $80,000 per acre, would require an expenditure of over $40,000,000 for the extra land.

3. Most of the property owners have agreed to "no charge" for their river land under our plan.

4. The City of Oceanside requires the building adjacent to the River area to be at the 100-year flood height, or higher. To accomplish this a large amount of dirt is required and the property owners would be glad to clean out the River, remove any dirt that is surplus to the River and put it on their own property, which they need badly. The Corps in their Single Levee Plan are proposing to dig out this dirt and haul it to the ocean. This saving is several million dollars. There are many more savings, but let me list the positive approach.

1. Over 16,000 ft. of rip rap levee are already constructed. Not all of it is 100-year flood height but all the property owners have agreed to bring their levees to the 100-year flood height. There is another 5,500 feet on the South shore that the Corps, after a 17 month delay, just this month granted a permit. This approximate 4 miles of levee deducted from the Congressionally Authorized Plan 11.4 miles leaves something less that 8 miles of levee to be built. We have a firm quotation of 100-year levee of $70 per running foot. Using the figure of $400,000 per mile, or $3,200,000 for the levee work leaving a balance of $1,800,000 for other works that we want to do. Suffice to say, we can do the job for under $5,000,000. We need permission from the Corps and cooperation with the City. Naturally, the property owners that build their own levees want the right to use their land.

The quest for flood protection in the San Luis Rey River area has been going on since 1938. In 1970, Congress passed a bill which became identified as the Congressionally Authorized Plan. This plan covering 420 acres and 7.2 miles of river channel with 5.7 miles of rip rap levees on both sides of the river from Murray Road to 1½ miles from the ocean - the estimated cost including land acquisition to be $9,720,000. The present estimate of the new Corps Single Levee Design is $45,000,000 - with over 3½ miles less protection on the North side of the river.

In 1968 the Corps, under the influence of the environmentalist agencies, started a new radical design by eliminating 3½ miles of levee on the North side of the lower end of what was the Congressionally Authorized Plan. The purpose was to please the environmentalists who were hoping to keep this particular unprotected area "open space" with no development. The original Corps design of the Congressionally Authorized Plan was to cover approximately 420 acres at a cost including land, estimated at $9,720,000. The present estimate of the new Corps Single Levee Design is over 920 acres with 3½ miles less protection on the North side of the river. The Corps estimated cost for this project is now $45,000,000.

The Corps soon recognized that to protect the south leveee they had to keep the river away from the South shore so they designed a series of groins perpendicular to the shore 190 feet long then added another 90 feet of vegetation, total 250 feet, moved the river to the north for another 400 feet and allowed another 150 feet of land (average) for the north bank area. This additional 400 feet by 3½ miles or approximately 170 acres - value at least $13,600,000. The City just made a deal with Home Capital for land near the River at $80,000 per acre.

After the 1980 flood, in order to protect our plant, we decided we could not wait for the Corps and constructed our own protection. We built what is about a 50-year flood protection levee on the south side of the river. Since the river was now confined by the south levee, during a flood the north bank began to wash away, and to protect our property we then built a revetment on the north side - our channel is 400 feet wide at the narrowest point, we kept the channel clean and are comfortable with our protection on both sides of the channel. When we resolve the differences between the City, Corps of Engineers and the property owners, we will build our revetments to the county 100-year maximum flood requirement.

Since we started building levees in 1980, other property owners have elected to do the same in the 5.7 miles that the Corps planned in 1970 - but, instead of a project flood control the property owners are planning to eventually complete a 100-year flood control, which is the maximum required by San Diego County. Following is a list of already built levees or revetments.

North Side			South Side		
Deutsch	3000 ft.	50- year	Deutsch	4000 ft.	50-year
Lee	2500 ft.	100-year	Siegal	2800 ft.	50-year
Oak Ind.	2000 ft.	100-year	Fredericks	2000 ft.	100-year

In the winter of 1982, most of Southern California had water damage. The San Luis Rey had one of its largest flows in years but because the pilot channel was relatively clean and many property owners had built their own levees, there was not any damage. This month the Corp finally granted a permit to build 5,500 feet of protection between Siegal and Fredericks, when this will be built the danger of any flood up to 50 years doing any serious damage to Oceanside will have been eliminated from Douglas Drive to the ocean.

In August, 1984, at our request, Mr. Sanford Wall, Deutsch Co. general counsel, and Mr. David Phifer, a cost consultant, met with Mr. William Cheadle, Chief of the Corps real estate division, and other members of the Corps to discuss, compare and substantiate the Corps values for land acquisition. Mr. Wall and Mr. Phifer were informed that the values were obtained from an independent appraisal report and that such report was exempt from the Freedom of Information Act and not for public viewing. A Freedom of Information Act request was made and denied. We are still unaware of the nature and method of the Corps valuation. We believe the Corps valuation placed on the extra 500 acres is far below real values. We question the integrity of the Corps approval.

There are many reasons why this project should go back to the Public Works Committees of the House and Senate.

1. The engineering is very bad.
2. The reasons for the design are now eliminated.
3. By using a Single Levee Design, the North river bank is not confined so that the river, during high flow can meander. As the river meanders, it will turn back against the single levee and undermine the rock and erode through the Levee so the Corps has proposed groins to keep the river from impinging on the river in a destructive manner. If there were a levee of 400 feet away from the South shore, like there is upstream, there would not be any need for extra land acquisitions, groin expense, etc. - saving of millions.
4. The City of Oceanside will not work with the property owners as long as there is an approved project, hoping for the $45,000,000 channel.
5. During the original examination back in the 1960's, research showed that the best plan would be a reservoir, the cost at that time did not seem to warrant a reservoir. The situation today is different - this should be re-examined.

Please send this project back to the respective House and Senate Commitees.

WEDNESDAY, APRIL 16, 1986.

SOUTH DAKOTA PROJECTS

WITNESSES

HON. THOMAS A. DASCHLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH DAKOTA

MORRIS KURLE, CHAIRMAN, BOARD OF DIRECTORS, WEB WATER DEVELOPMENT ASSOCIATION

BOB NEUFELD, SOUTH DAKOTA DEPARTMENT OF WATER AND NATURAL RESOURCES

Mr. BEVILL. Our good friend and colleague, Congressman Daschle, is here. The Chair will recognize you, and your prepared statement will be made a part of the record.

Mr. DASCHLE. Thank you very much. I have the Chairman of the WEB project, Mr. Morris Kurle, with me today. I will submit my statement on behalf of four South Dakota projects and very briefly summarize my written testimony.

I know the difficult budgetary constraints under which we work this year. As a result, we are increasingly conservative in the things for which we ask your continued support. This subcommittee has been tremendous in providing us with the kind of help that we must have for our South Dakota projects.

The WEB Water System is represented here today by Mr. Morris Kurle. In addition to that, I speak on behalf of the Belle Fourche irrigation project, the Missouri River bank stabilization project and the CENDAK irrigation project.

I am pleased to report that, in the case of WEB, we are ahead of schedule right now. My written statement speaks for itself. It elaborates our reasons for the need for continued funding of these four projects.

[The statement of Mr. Daschle follows:]

Testimony of

CONGRESSMAN TOM DASCHLE
SOUTH DAKOTA

Before the
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APPROPRIATIONS COMMITTEE
U.S. HOUSE OF REPRESENTATIVES
April 16, 1986

Chairman Bevill and members of the Subcommittee, I welcome and appreciate the opportunity to once again appear before the Subcommittee on Energy and Water Development Appropriations in support of the continued development of South Dakota's water resources. I am privileged to be accompanied today by Mr. Warren R. Neufeld from the South Dakota Department of Water and Natural Resources and Mr. Morris Kurle of the WEB Water Development Association and Darrel Curry of the Missouri River Bank Stabilization Association. I will also speak on behalf of the Belle Fourche and CENDAK irrigation projects in South Dakota.

I would preface my remarks by thanking Chairman Bevill and the entire Subcommittee for their continued support for the development of water resources in South Dakota. I know I speak for all of South Dakota's project sponsors in expressing sincere gratitude for this panel's interest and continued support.

Mr. Chairman, I am not unaware of the challenge the Appropriations Committee faces. I am well aware of the Subcommittee's dedication to the development of America's water resources. But I also know that the Subcommittee faces the reality of the huge federal budget deficit and must approve federal spending within the confines of the deficit reduction targets set out in the Gramm-Rudman Balanced Budget Act.

I support Gramm-Rudman as a necessary tool to eliminate the federal budget deficit, which is crippling agriculture and keeping interest rates out of the reach of average citizens. The challenge enjoyed a more than ten fold increase in commercial shipping tonnage, enormous revenues from the sale of hydroelectric power, and the avoidance of billions of dollars of flood control damage.

While downstream states reap the rewards of this highly successful multi-purpose federal program, South Dakota has received little of its promised benefits. The construction of these engineering wonders permanently flooded over one-half million acres of rich bottomland in South Dakota. To compensate for this extraordinary sacrifice for the national interest, South Dakota was promised large-scale water development. We ask only that the federal government begin living up to that commitment which was made over forty years ago.

In a moment you will hear from the WEB rural water project in northeastern South Dakota. WEB is an excellent example of the benefits that can be realized through federal water development in South Dakota. In 1981, I appeared before the Subcommittee to urge that federal funding be provided for a critically important Missouri River supply of municipal and industrial water to rural areas of northeastern South Dakota. I think you will agree that this is one federal investment that has paid off tremendously well.

Five years after I first urged this Subcommittee to fund WEB, I am pleased to report that the project is almsot a full year ahead of schedule. Because the comprehensive WEB system has only one pumping station and one purification plant, it is able to provide water at a lower cost than traditional, modest-sized FmHA projects drawing from ground water. And, of particular interest to Congress in these times of severe fiscal constraint, WEB, through prudent management, is currently approximately $3.2 million UNDER budget. The

Subcommittee would be hard pressed to find a more impressive success story in the Bureau of Reclamation construction program.

This year WEB has the capacity to spend $30 million to bring its operations to an additional 1400 farm families in Brown and Day counties. With the low cost of general operations and petroleum-based plastic pipe due to the current world oil glut, WEB would like to accelerate its construction schedule to take advantage of these favorable economic conditions. I urge the Subcommittee to approve $30 million for WEB to allow them to take full advantage of the current low cost of construction and save the federal taxpayer millions of dollars in the process.

On several occasions, I have had the opportunity to visit with many of you about the importance of funding the rehabilitation of the Belle Fourche irrigation project. After two consecutive years of staunch opposition from the the Bureau of Reclamation and the Office of Management and Budget, I am pleased to report that we have been successful in persuading the Administration to back this existing irrigation project in western South Dakota.

The Belle Fourche project, first constructed at the turn of the century, has been affectionately dubbed the "Granddaddy of Reclamation projects." Eighty years of service, however, does take a toll on even the best irrigation systems. With the approval of the Administration's recommended level of $3.9 million, the project will be able to complete collection of design data, initiate design for the Diversion Dam, and begin construction on many of the laterals. Rehabilitation of the project will reduce annual operation costs by reducing seepage losses and providing measuring devices to monitor the efficiency of the distribution project. We could not have come this far without the support this Subcommittee has exhibited in the past. I urge you to approve the entire Administration request of $3.9 million for the project in FY 1987 so construction of the project can proceed as soon as possible.

The CENDAK irrigation project is currently preparing to complete it final planning and design documents in anticipation of congressional authorization later this year. I am disturbed, however, that the Administration has recommended only $200,000 for the completion of these studies. In order to swiftly complete detailed land classification and drainage studies, approximately $750,000 is needed for FY 1987.

The federal government has invested a great deal of time and resources in this project, and construction has yet to begin. But, as with all good investments, it is important to carefully study the relative costs and benefits of the project to be undertaken. The CENDAK project has proven again and again in preliminary reports that it is an economically feasible and environmentally sound project that will provide economic stability to struggling farmers and ranchers. I urge the Subcommittee to ignore the deflated funding recommendation of the Administration and provide adequate funding to bring these studies to a logical completion. I am confident that with the completion of these studies, Congress will agree that its investment in CENDAK has paid dividends and will swiftly approve the project's authorization.

Following this panel, you will hear from Mr. Darrel Curry, the Vice President of the Missouri River Bank Stabilization Association. In 1978, a 59-mile stretch of the Missouri River between Yankton, South Dakota and Ponca State Park, Nebraska, was designated by Congress the Missouri National Recreation Project (P.L. 95-625, Section 707). Under this law, the Department of the Interior is directed to spend up to $21,000,000 to preserve the wild and scenic beauty of this last stretch of the Missouri which has not been channelized or otherwise altered by man. As any visitor can attest, the beauty of this stretch of river is unrivaled.

The grandeur of the project area must be preserved for future Americans to enjoy. Presently, releases from the upstream Gavins Point Dam ravage the sandy riverbanks of this 59-mile segment of the "Big Muddy." Existing streambank protection features are in a state of extreme disrepair, and new protection features are needed to maintain the natural beauty of the River.

The project sponsors are willing to share in the cost of constructing access facilities to the River, such as boat launching, parking areas, and comfort stations. In fact, I am advised local entities have already agreed to the concept of local cost sharing.

With regard to expenditures that preserve the character of the Missouri National Recreational Project, the situation is, of course, very different. In this unusual case, it is the responsibility of the administrating body, the Department of the Interior (P.L. 95-625), to share costs with another federal entity, the Army Corps of Engineers, for that preservation. In this case, therefore, cost-sharing for local sponsors is not applicable for the streambank protection features of the project.

I strongly support that Association's effort to secure $200,000 for operation and maintenance of existing streambank protection features and $1,000,000 for new construction. This work will maintain and enhance the natural beauty of the Missouri National Recreational Project for generations to come.

Again, Mr. Chairman, I want to thank you and the entire Appropriations Committee for your kind support. Working together, I know we can at long last deliver responsible water development to South Dakota. At this time, I would be pleased to answer any questions the Subcommittee has about these South Dakota projects.

Mr. BEVILL. Mr. Kurle.

Mr. KURLE. Mr. Chairman and members of the appropriations subcommittee, I am Morris Kurle, Chairman of the WEB Water Development Association, more commonly known as the WEB Pipeline Project.

I want to thank the members of this committee for their past support. I am going to make our request brief, also.

Our request is that the subcommittee and the full committee approve and support the line item appropriation of $21.4 million for fiscal year 1987. We are grateful for the support shown, and the funds are needed to get the first three phases of construction into operation, and to allow for construction of phase four.

In addition to the fiscal year 1987 appropriation, we would respectfully request that the subcommittee give support to reallocation of additional funds, construction funds, to the WEB Project, should additional funds not be used on other projects and become available.

The WEB association has six construction contracts designed and ready for construction, and these represent an additional expenditure capability of $10.4 million.

We could spend that money, provided we are given ample time. The bids on the first 23 projects for the WEB project have come in $3.2 million below the engineer's estimate.

Presently, crude oil prices have resulted in reduced prices for PVC pipe. We will use approximately 3700 miles of PVC pipe.

The project has always enjoyed strong local support and this is evidenced by the high percentage of sign up in the project area of 85 percent. All right-of-ways for construction of the project thus far has been given, and voluntarily by landowners without compensation.

The WEB project enjoys a strong and active support of the members of the Congressional Delegation, and Congressman Daschle, Senator Abdnor and Pressler.

Thank you.

[The statement of Mr. Kurle follows:]

WATER DEVELOPMENT ASSOCIATION INC.

WALWORTH • EDMUNDS • BROWN • DAY • SPINK
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TESTIMONY
WEB WATER DEVELOPMENT ASSOCIATION, INC
APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
U.S. HOUSE OF REPRESENTATIVES
APRIL 16, 1986

Mr. Chairman, and members of the Appropriations Subcommittee on Energy and Water Development. I am Morris Kurle, Chairman of the WEB Water Development Association Inc., which serves as the local sponsor for the construction and operation of the WEB Rural Water Development Project, commonly known as the "WEB Pipeline Project". The WEB Project is a Bureau of Reclamation project being constructed in South Dakota under Public Law 96-355 and Public Law 97-237.

I want to thank the members of this Committee and the entire Congress for the support you have given the WEB Project and South Dakota. After 11 years of effort the benefits of good quality Missouri River water will finally be made available to the first 1,145 farms and 13 towns in Phases I, II, and III of the WEB Project this spring and summer. The WEB Project will correct a water quality problem that has confronted residents of our area since the homestead days of the 1800's when the Dakota Territory was opened for settlement and my ancestors, and others like them, immigrated from Germany, southern Russia, and other countries and turned prairie into farm land and built towns where none existed before. Unless you have lived in an area were water is limited or poor quality it is hard to understand or appreciate how important water is. Lack of good quality water has limited development of our State from the days when homesteaders caught rain water off of roofs and railroad steam engines rusted out because of poor quality water. On behalf of the residents of the WEB area I want to thank you.

Action Requested

Our request is that the Subcommittee and the full Committee approve and support the line item appropriation for the WEB Pipeline Project recommended by the Administration in the amount of $21,400,000 for Fiscal Year 1987. We are greatful for the recognition and support shown for the Project by the Reagan Administration. The funds are needed to get the first three phases of construction completed and operational and to allow for construction of Phase 4 of the project.

Reallocation

In addition to the FY-87 appropriation, we would respectfully request that the Subcommittee give support to reallocation of additional construction funds to the WEB Project in Fiscal Year 1986, should additional funds not used for other projects become available in the Department of Interior's budget. The WEB Association has six (6) construction contracts designed and ready for construction should any additional funds become available in FY-86. These contracts represent an additional construction expenditure capability of $10,430,000 in FY-86 provided we are given timely notice. The WEB Project has been designed to be constructed in small "Phases" which make it easy to utilize construction funds in any amount and still be able to show immediated water service to customers when the construction of the Phase is completed.

The WEB Pipeline Project was one of the Bureau of Reclamation projects which expended all the funds that where appropriated and reallocated to it in Fiscal Year 1985. Bid prices on the WEB Project are coming in good and if reallocation funds remain available in the Fiscal Year 1986 budget we feel they could be well spent on the WEB Project.

Project Summary

Construction of the WEB Project will bring good quality domestic water to 3,700 farms and 58 towns and bulk users in South Dakota. The water will be used for human use, livestock, and small industry. Presently towns and farms in the project area rely upon ground water supplies which are poor in quality, are limited in quantity, and are expensive to construct and maintain. A delay in construction and completion of the project will result in countless farms and towns that are signed up for WEB water having to replace or repair ground well water sources at considerable expense.

Adequate funding for the WEB Project will assure early repayment of loan funds by Project users. Under the repayment contract payment begins when the Project is completed and operational. Delay in construction funding would extend and delay the date when repayment would begin.

Construction contracts on Phase I of the Project are over 95% complete and are expected to go into operation in May, 1986. Construction on Phase II of the Project is 85% complete and could be operational as early as July, 1986. Construction in Phase III of the Project is 53% complete and the first users could be served in the Contract 3-2A area as early as September, 1986.

In May, 1986 major project features, including the Pumping Plant, the Water Treatment Plant, the Main Storage Reservoir, 21 miles of Main Transmission Pipeline, and over 598 miles of Secondary Transmission pipeline (PVC pipe) will be in service providing water to about 549 farms and 6 towns and bulk users (Pollock, State Line Rural Water System of N.D., Glenham, Lowry, Akaska, Selby).

Phase II should be operational as early as July or August with 30 miles of Main Pipeline and 548 miles of Secondary Transmission Pipeline which will serve 403 farms and 5 towns and bulk users (Roscoe, Hosmer, Bowdle H.S., Faulkton, Wecota).

Half of Phase III of the Project could be completed and operational as early as August or September and will involve about 10 miles of Main Transmission Pipeline and 256 miles of Secondary Distribution Pipelines which will serve 195 farms and 2 towns (Chelsea and Cresbard).

The second half of Phase III, which work is just starting on this spring, will include 15 miles of Main Pipeline and 330 miles of Secondary Distribution Pipelines and will serve 230 farms and 3 towns (Leola, Ipswich, Wetonka).

The remainder of the Project is included in Phases IV, V, and VI. Design has been completed on Phase IV which will include about 40 miles of Main Transmission Pipeline and about 900 miles of Secondary Transmission Pipeline. Plans and Specifications could be completed and bids advertised on Phase IV in May if additional funds were available.

Economic Impact

The bids on the first 23 contracts for the WEB

Project have came in $3,216,514 below the engineer's estimate. The current construction market is favorable for construction of the WEB Project. Over 3,500 miles of the WEB Pipeline system will be constructed of PVC pipe, which is made from a by-product of the crude oil industry. Present low crude oil prices have resulted in reduced costs for PVC pipe.

Construction of the WEB Project in South Dakota results in jobs and economic impact in other states. Pumps, motors, pipe, control equipment, PVC pipe, and the contractors to install them have found work on the WEB Project. Materials and contractors from such states as Alabama, Minnesota, Tennessee, Pennsylvania, Illinois, New York, California, Maryland, Ohio, Iowa, New Jersey, Colorado, Texas, Oklahoma, North Dakota, Nebraska, Kansas, and other states.

Historic Committment

Construction of the WEB Project represents the first construction funding for a major water project in South Dakota since 1977. Construction of the WEB Project represents a partial compensation to the State of South Dakota for the loss of some 500,000 acres of productive farm land which were inundated by the construction of the main stem dams and reservoirs on the Missouri River in the 1960's. The reservoirs provide flood control, power generation, and navigation benefits to down stream states and provide important barge transportation for the central United States.

Project Description & History

The WEB Pipeline Project was first envisioned in 1975 by local County and Town officals in Walworth, Edmunds, and Brown Counties. WEB tooks it's name for these three counties. The project area quickly grew to all or parts of 13 counties. Signups were taken in each county by a local "Steering Committee" and funds collected were used to finance engineering feasibility studies.

The WEB Project will provide quality domestic water to towns and farms in a project area larger than the state of Connecticut. The source of water for the project is the Missouri River, Lake Oahe Reservoir which is an impoundment of water created by construction of Lake Oahe Dam and Reservoir, a U.S. Corps of Engineers facility constructed under the Pick-Sloan Act.

The area to be served contains 5,245 square miles. The project will serve 58 towns and bulk users and 3,700 farms, ranches, and rural home sites. The project will also provide water for 532,000 head of livestock. The project area represents about 8% of the land area of the State of South Dakota, and within that area approximately 85% of the population are signed up to be served.

Project construction includes 116 miles of Main Transmission Pipeline ranging in size from 30 inch to 14 inch ductile iron, steel, or PVC pipe. There will be 3,401 miles of Secondary Distribution pipe ranging in size from 14 inch to 1½ PVC (pol-vinyl pipe).

Project water will be pumped from Lake Oahe 3½ miles east to a central Water Treatment Plant where water will be cleaned, filtered, treated, and dispersed to project users through the WEB pipeline system. Water will be sold to users on a metered basis and revenues collected will be used to meet repayment obligations and operational costs.

The feasibility of the WEB Pipeline Project and it's repayment capability were examined by the Bureau of Reclamation, the Department of Interior, the Office of Management and Budget, and the State of South Dakota in 1983 and approved. All construction contract plans and specifications are reviewed by the Bureau of Reclamation and the S.D. Department of Water and Natural Resources before contracts are awarded. Historic and Cultural Resource Surveys are completed before construction begins, and sensitive areas are avoided. The Bureau of Reclamation, with offices in Pierre and Newell, South Dakota, provide federal oversight for the construction of the project. A representative of the Bureau of Reclamation attends WEB Board Meetings and construction related meetings as well as provides some onsite inspection.

The engineers for the WEB Project are Bartlett and West Engineering of Topeka, Kansas and Boyle Engineering Corporation of Bakersfield, California. A staff of Resident Engineers provided by BW/BEC, assisted by Resident Inspectors provided by the WEB Association, observe the day-to-day construction of the Project.

The activities of the WEB Water Development Association, Inc., are governed by a nine (9) member Board of Directors which are elected by the membership at an Annual Meeting. The Board is made up of six (6) rural directors elected from specific rural districts and three (3) municipal directors elected at large.

Authority

Construction of the WEB Project was first authorized by Congress in September of 1980 through passage of Public Law 96-355. The Project was "reauthorized" in September of 1982 through the passage of Public Law 97-273. Project "Design Report" dated September, 1983 represents the authorizing document reviewed by Congress when the authorization was approved.

Construction Status

A repayment contract was signed and entered into on September 28, 1983 and the first construction was awarded on the Lake Oahe Pumping Plant on October 13, 1983 and construction began on October 20, 1983.

As of this date, bids have been opened and/or awarded on 23 contracts totaling $44,513,326 (see WEB Attachment "A"). In addition, contracts totaling $12,379,639 in the Phase IV area have been designed and are ready for bid.

Funding and Repayment

On February 14, 1986 Project construction costs were estimated by Project Engineers to be $105,437,000 (see WEB Attachment "B"). Funding for the Project includes $4,000,000 in construction funding provided by the WEB Water Development Association through membership hookup fees and contributions from the Oahe Conservancy Sub-district, a regional water district supported by local tax levy. The WEB Association will also repay $21,576,000 in loans with interest.

Need

There is great need in the WEB Project area for good quality domestic water. The quality of groundwater supplies in the area is poor and in most cases does not meet the federal standards for health and safety. It is estimated that from 20% to 25% of the water consumed on farms in the WEB Project area is not fit for human consumption. Poor quality water causes stress on livestock resulting in reduced milk production, reduced weight gain, and health problems.

Ground wells are difficult to maintain and are costly to replace. The estimated life of deep artesian wells in the western portion of the WEB Project is 10 to 12 years. Replacement costs run from $20,000 to $25,000 per well. Farmers hard pressed by todays agricultural economy find repair and replacement of wells a burden that can make staying on the farm difficult.

The WEB Project will provide good quality water for household and livestock use at a reasonable cost. The WEB Project will provide a stable and reliable water supply.

WEB water rates will result in a water bill of $50.00 for the average farm using about 19,000 gallons of water per month. Towns and bulk users will pay from $1.22 to $1.79 per thousand gallons of water use depending upon the towns water storage system.

Local Support

The WEB Project has allways enjoyed strong local support. This is evidenced by the high percentage of signup in the project area (85%), and the funding support given the project by WEB members, the Oahe Subdistrict, and the State of South Dakota.

Environmental Impacts

Because the WEB Project water is delivered through a system of buried pipeline, construction will result in no longer term disruption or impact to the environment. All right-of-way secured for construction of the project thus far has been "given" voluntarily by landowners without compensation.

The WEB Project enjoys the strong and active support of the members of the South Dakota Congressional Delegation, Senator James Abdnor, Senator Larry Pressler, and Congressman Tom Daschle. Thank you.

Morris Kurle

Morris Kurle, Chairman
WEB Water Development Association, Inc.

WEB Attachment "A"

October 8, 1985
March 15, 1986

"Update"
WEB RURAL WATER DEVELOPMENT PROJECT
SOUTH DAKOTA

Population Served

25,000 people (85% of people in service area)

57 towns and bulk users	15,000 peoople
3,700 rural taps*	10,000 people
170 rural taps (North Dakota)	600 people

531,918 livestock (cattle equivalent use 401,000)

*As of July, 1985

Area Served

5,245 square miles (larger than State of Connecticut)
13 county area - north central South Dakota
140 miles long x 90 miles wide (240 miles from furthest points)

Project Facilities

Storage Reservoir Capacity	8,084,000 gallon
Lake Oahe Intake & Pumps	4,861 GPM
Water Treatment Plant	7.7 MGD - peak
Main Transmission Line (30"-14")	116 miles
Secondary Trans. & Dist. Line (14" x 1½")	3,401 miles
Reservoirs & Storage Tanks	17
Total Miles of Pipeline	3,517 miles
Pipeline Depth (from top of pipe)	6 to 7 feet min.

Project Cost

Total Cost (USBR Indexed as of 10/86 costs)	$105,400,000

Funding

Federal loans and grant	$101,400,000
Local Funds (State, Oahe Sub-District, WEB)	$ 4,000,000

Authority

Authorized by Congress (PL 973)	September 1982
Final Plans and Spec's	September 1983
Repayment Contract Signed	September 29, 1983
First Contract Award	October 13, 1983
Construction Begun	October 20, 1983

WEB Attachment "A"

Federal Agency

U.S. Department of Interior - Bureau of Reclamation

Construction Completed
As of March 15, 1986

Total Program Outlay To date	$38,656,171.16 (*)
Storage Reservoir Capacity Complete	3,100,000 gallon
Lake Oahe Intake & Pumping Plant Complete	
Water Treatment Plant Complete	
Main Pipeline (30" and 24" DIP) Complete	52.3 miles
Rural Distribution Pipelines (14" to 1½" PVC) Complete	1349 miles
TOTAL PIPE MILES INSTALLED (As of 3/15/86)	1401 miles

FY-86 Appropriations

Authorized Funds FY-86	$18,525,000
** LESS: Fund Reduction (Gramm-Rudman and "under financing")	- 2,327,775(13%)
FEDERAL FUNDS AVAILABLE FY-86	$16,197,225 (**)

FY-87 Budget Request

FY-87	$32,979,000
FY-88	20,858,000

FY-87 Budget Proposal

FY-87	$21,400,000

(* Federal Funds $37,423,171.16, and local funds of $1,233,000)

(** November, 1985 -$1,600,000, and January, 1986 -$727,775.00)

WEB Attachment "A"

WEB PROJECT STATUS REPORT

As Of March 15, 1986

Project Feature or Area	% Complete	Pipe Miles	Farms Connected	Bulk Users & Towns To Be Served
Phase 1: (98% Complete)				
Contract 1-1B (Pumping Plant)	99%			
Contract 1-2 (Main Pipeline)	100%	3.5		
Contract 1-3 (Treatment Plant)	98%			
Contract 1-4 (main Pipeline)	100%	3.5		
Contract 1-4A (Main Pipeline)	100%	14.5		
Contract 1-5A (M. City, Selby, Area)	97%	324	309	4
Contract 1-5B (Lowry, Hoven Areas)	98%	274	240	2
Contract 1-6B (1 Water Storage Tank)	100%			
Contract 1-7 (Main Storage Reservoir 2,500,000 gal.)	95%			
Phase 2: (91% Complete)				
Contract 2-1A (Main Pipeline)	99%	16.1		
Contract 2-1B (Main Pipeline)	95%	14.7		
Contract 2-2A (Java, Hosmer, & N. Roscoe Areas)	78%	214	202	3
Contract 2-2B (S. Roscoe, Seneca, & Faulkton Areas)	89%	285	201	2
Contract 2-3 (4 Water Storage Tanks)	99%			
Phase 3: (35% Complete)				
Contracts 3-1A & 3-1B (Main Pipeline)	25%	-		
Contract 3-2A (Beebe, S. Ipswich, & Cresbard Areas)	92%	252	193	2
	(Main)	52.3	1,145	13*
	(Rural)	1,349		
TOTALS - COMPLETED AS OF 3/15/86		1,401.3	1,145	13*
TOTAL PROJECT FEATURES		3,517	3,700	58

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* Towns or Bulk Users Connected to Date: Pollock, State Line Rural Water System of North Dakota, Glenham, Akaska, Selby, Lowry, Bowdle School, Hosmer, Roscoe, Faulkton, Wecota, Cresbard, and Chelsea

Engineer's Estimate Comparison - Phase III

Contract Number	Estimate At Bid Time	July 1983 Estimate (2)	Low Bid	Comments
3-1A	$1,821,068	$1,171,666	$1,624,059	
3-1B	3,172,384	2,837,071	2,632,191	
3-1PRS	208,400	--	277,900	
3-2A	3,462,816	3,391,860	2,995,327	
3-2B	4,766,432	3,870,070	4,047,071	
3-3A	147,000	147,000	177,073	
TOTAL	$13,578,100	$11,417,667	$11,753,621	

Engineer's Estimate Comparison - Phase II

Contract Number	April 1985 Estimate (2)	July 1983 Estimate (2)	4/17/85 Low Bid	Comments
2-1A	$4.289,997		$3,923,709	83 Capacity + 10%
2-1B	3,322,570	$7,190,778	3,152,237	63 Estimate on ACP
2-2A	2,453,683		2,570,178	
2-2B	3,789,300	5,889,453	3,876,986	
2-3	408,000	410,000	422.607	83 Estimate on Welded
Total	$14,263,550	$13,490,231	$13,945,717	

+6%

Engineer's Estimate Comparison - Phase I

Contract Number	Estimates at Bid Time	July 1983 Estimate (2)	Contract Amount 2/25/85	
1-1A	53,897		53,897	
1-1B	1,568,000	1,654,000	1,768,693	
1-1C	129,000		96,171 (1)	
1-1D			(1)	
1-3	3,910,000	3,670,000	3,768,888	
1-2	783,598		614,992	
1-4	714,700	4,945,840	674,879	
1-4A	3,552,882		3,035,218	
1-5A	4,298,392		3,970,421	
1-5B	3,010,656	6,527,204	2,272,130	
1-6B	338,000	320,000	309,634	83 Estimate on Welded
1-7	810,000	555,000	1,074,000	83 Estimate on Welded
Total	$19,169,125	$17,672,044	$18,094,923	
Phase I&II&III	$47,010,775	$42,579.942	$43,794,261	

Engineer's Estimate	$47,010,775
Actual Bid Received	43,794,261
Below Estimate	$ 3,216,514

WEB Attachment "A"

WEB WATER DEVELOPMENT ASSOCIATION INC.

MONTHLY CONSTRUCTION PROGRESS REPORT

PROJECT SECTION	TOTAL CONTRACT AMOUNT*	DUE CONTRACTORS	EARNINGS THIS PERIOD	% COMPLETE
PHASE 1	18,277,657	17,862,657	54,470	98
PHASE 2	14,540,253	13,269,884	118,271	91
PHASE 3	7,753,595	3,738,815	444,900	48
SUMMARY TO END OF P ERIOD	40,571,505	34,871,356	617,641	86

* Does not include non awarded contracts.

PHASE 3

WEB WATER DEVELOPMENT ASSOCIATION INC.

MONTHLY CONSTRUCTION PROGRESS REPORT

CONTRACT	CONTRACTOR	CONTRACT AMOUNT	DUE CONTRACTOR	EARNINGS THIS PERIOD	% COMP
WEB 3-1A Main Transmission	Barbarossa & Sons, Inc. Osseo, MN	$1,624,059	$ 893,509	$ 444,900	55
WEB 3-1B Main Transmission	Barbarossa & Sons, Inc. Osseo, MN	2,632,191	-0-	-0-	0
WEB 3-1PRS Pressure Red. Stations	Barbarossa & Sons, Inc. Osseo, MN	277,900	-0-	-0-	0
WEB 3-2A Secondary Distribution	Michels Pipe Line Const. Brownsville, WI	3,042,372	2,845,306	-0-	94
WEB 3-2B Secondary Distribution	Not Yet Awarded	3,941,821*	N/A	N/A	N/A
WEB 3-3A Water Storage Tank	Engineering America, Inc. Minneapolis, MN	177,073	-0-	-0-	0
SUMMARY TO END OF PERIOD		$11,695,416	$3,738,815	$444,900	32

*Base Bid

PHASE 2

WEB WATER DEVELOPMENT ASSOCIATION INC.

MONTHLY CONSTRUCTION PROGRESS REPORT

CONTRACT	CONTRACTOR	CONTRACT AMOUNT*	DUE CONTRACTOR	EARNINGS THIS PERIOD	% COMPLET
WEB 2-1A Main Transmission	Barbarossa & Sons, Inc. Osseo, MN	$ 3,923,709	$ 3,923,309	$ -0-	99
WEB 2-1B Main Transmission	Barbarossa & Sons, Inc. Osseo, MN	3,152,238	3,001,041	-0-	95
WEB 2-2A Secondary Distribution	Eatherly Constructors, Inc. Garden City, KS	2,818,797	2,186,144	58,230	78
WEB 2-2B Secondary Distribution	Eatherly Constructors, Inc. Garden City, KS	4,218,561	3,732,442	60,041	89
WEB 2-3 Water Storage Tanks	Engineering America, Inc. Minneapolis, MN	426,948	426,948	-0-	99
SUMMARY TO END OF PERIOD		$14,540,253	$13,269,884	$118,271	91

* Amount to Nearest Dollar

WEB Attachment "A"

PHASE 2

WEB WATER DEVELOPMENT ASSOCIATION INC.

MONTHLY CONSTRUCTION PROGRESS REPORT

CONTRACT	CONTRACTOR	CONTRACT AMOUNT*	DUE CONTRACTOR	EARNINGS THIS PERIOD	% COMPLET
WEB 2-1A Main Transmission	Barbarossa & Sons, Inc. Osseo, MN	$ 3,923,709	$ 3,923,309	$ -0-	99
WEB 2-1B Main Transmission	Barbarossa & Sons, Inc. Osseo, MN	3,152,238	3,001,041	-0-	95
WEB 2-2A Secondary Distribution	Eatherly Constructors, Inc. Garden City, KS	2,818,797	2,186,144	58,230	78
WEB 2-2B Secondary Distribution	Eatherly Constructors, Inc. Garden City, KS	4,218,561	3,732,442	60,041	89
WEB 2-3 Water Storage Tanks	Engineering America, Inc. Minneapolis, MN	426,948	426,948	-0-	99
SUMMARY TO END OF PERIOD		$14,540,253	$13,269,884	$118,271	91

* Amount to Nearest Dollar

WEB Attachment "A"

Attachment "B'

TABLE 1

TOTAL PROJECT COSTS
To 2/14/86

Project Component	Cost	Subtotal	Total
1. Development & Construction	87.700		
(see Table 2)		87.700	
2. Land & Rights	.215		
(Design Report + 5%)		.215	
3. Legal	1.208		
(Design Report + 5%)		1.208	
4. Engineering			
Basic Services *(1)	4.560		
Additional Services *(2)	0.580		
Resident Inspection *(3)	3.508		
		8.648	
5. Interest	2.580		
(Design Report)		2.580	
6. Equipment	.193		
(Design Report + 5%)		.193	
7. Contingencies *(4)	3.412		
		3.412	
8. Initial O & M	.563		
(Design Report + 10%)		.563	
9. Inital Reserve	.130		
		.130	
10. Federal Administration	.788		
(Design Report + 5%)		.788	
TOTAL ESTIMATE WEB COST			105.437

*(1) Construction Est. x 5.2%
*(2) Fees to Date + $150,000
*(3) Construction Est. x 4.0%
*(4) 6.3% on uncompleted project items based on Total Est. Cost to Date, Less Total Earnings to Date

WEB Attachment "B"

TABLE 2

UPDATE WEB CONSTRUCTION COSTS
To 2/14/86

Phase 1:	Cost	Note	Totals
1-1A; Intake; Contract Amount (C.A.)	$ 53,897	---	
1-1B; Intake; C.A.	1,772,119	---	
1-1C; Slope ; Bid Amount (Not Awarded)	96,171	---	
1-1D; Rip Rap; C.A.	46,582	---	
1-2 ; Raw Water; C.A.	614,992	---	
1-3 ; WTP; C.A.	3,803,868	---	
1-3A; WTP Expansion; Est.	2,832,500	1	
1-4 ; Main Line; C.A.	685,221	---	
1-4A; Main Line; C.A.	3,034,140	---	
1-5A; Secondary; C.A.	3,964,755	---	
1-5B; Secondary; C.A.	2,783,924	---	
1-6B; Tanks ; C.A.	347,318	---	
1-7 ; Main Tank; C.A.	1,074,105	---	
1-7A; Main Tank; Est.	773,170	2	
----; Rip Rap ; C.A.	28,018	---	
1-1E; Site Work; Est.	50,000	---	
1-4B; Cathodic Protection; Est.	75,000	3	
TOTALS			$22,035,780

Phase 2:	Cost	Note	Totals
2-1A; Main Line; C.A	$ 3,923,709	---	
2-1B; Main Line; C.A.	3,228,692	---	
2-2A; Secondary; C.A.	2,818,797	---	
2-2B; Secondary; C.A.	4,218,561	---	
2-3 ; Tanks ; C.A.	426,948	---	
2-1F; Cathodic Protection; Est.	105,000	3	
----; Faulkton Revision; Est.	150,000	4	
TOTALS			$14,871,707

Phase 3:	Cost	Note	Totals
3-1A; Main Line; C.A.	$ 1,624,059	---	
3-1B; Main Line; C.A.	2,624,991	---	
3-1PRS; Vaults ; C.A.	277,900	---	
3-2A; Secondary; C.A.	3,042,372	---	
3-2B; Secondary; Est.	4,217,688	---	
3-3A; Tanks ; C.A.	177,073	---	
3-3B; Tanks ; Est.	280,000	5	
3-1F; Cathodic ; Est.	75,000	3	
TOTALS			$12,319,083

WEB Attachment "B"

Phase 4:	Cost	Note	Totals
4-1A; Main Line; Est.	$ 2,320,392	6	
4-1B; Main Line; Est.	2,855,677	6	
4-1C; Main Line; Est.	2,027,518	6	
4-1D; Main Line; Est.	1,296,306	6	
4-1E; Main Line; Est.	1,837,500	7	
4-2A; Secondary; Aberdeen & partial Warner Est.	3,292,591	8	
4-2B; Secondary; Frederick area Est.	2,720,057	8	
4-2C; Secondary; Warner area Est.	2,870,662	8	
4-3A; Aberdeen Tank; Est.	586,000	9	
4-3B; Fred. Tank; Est.	158,000	10	
TOTALS			$19,964,703

Phase 5:	Cost	Note	Totals
1. Andover Service Area; Est.	$ 1,186,346	12	
2. Ashton Service Area; Est.	5,250,442	12	
3. Conde Service Area; Est.	3,680,153	12	
4. Doland Service Area; Est.	1,824,441	12	
5. Webster Service Area; Est.	4,677,534	12	
TOTALS			$16,618,916

Misc. Facilities:	Cost	Note	Totals
Control System; Est.	$ 680,400	11	
O & M Center; Est.	237,600	11	
Town Improvements; Est.	972,000	11	
TOTALS			$ 1,890,000

TOTAL ESTIMATED COSTS; ALL PHASES & FACILITIES $87,700,189

Notes to Table 1:

1. Design Report shows
   WTP expansion = $2,450,000
   + Intake expansion = 125,000
   = $2,575,000 x 1.10 Inflation Factor

WEB Attachment "B"

2. Analysis of expected costs of concrete
    Reservoirs of SWPP shows cost of .25/gallon.
    Cost of .25/gallon leaves $449,000 on 1-7 site work, etc.
    Assume 1-7A to need 1/3 total of 1-7 site work, etc.
    Therefore 1-7A calc. as follows:
        (2.5 million gallons x .25) + 1/3 (449,000) = $773,170

3. Analysis of expected costs of Cathodic Protection for SWPP
    Shows cost of 15,000 +/- for each protectión station.
    Stations spaced as follows:
        30" Line; 1 Station per 3.5 miles +/-
        24" Line; 1 Station per 4.5 miles +/-
        18" Line; 1 Station per 5.5 miles +/-
        14" Line; 1 Station per 10.5 miles +/-

On Phase 1:

Contract 1-2 ; 3.26 miles of 24" ---------- 1 Station
Contract 1-4 ; 3.23 miles of 24" ---------- 1 Station
Contract 1-4A; 14.50 miles of 24" ---------- 3 Stations

5 Stations x 15000 = $75,000

On Phase 2:

Contract 2-1A; 8.6 miles of 30" ---------- 2 Stations
7.5 miles of 24" ---------- 2 Stations
Contract 2-1B; 14.7 miles of 24" ---------- 3 Stations

7 Stations x 15,000 = $105,000

On Phase 3:

Contract 3-1A; 10.0 miles of 18" ---------- 2 Stations
Contract 3-1B; 15.0 miles of 18"/20" ------- 3 Stations

5 Stations x 15,000 = $75,000

4. Represents additions of rural users S. and E. of
    Faulkton; within Faulkton Service area.
    Estimate based on 2-2B unit prices.

5. Revised from Design Report from 1 tank @ 125,000
    to 3 tanks @ 280,000

6. Per Doug Mund's Estimate of 1/7/86:
    4-1A; 2,320,392
    4-1B; 2,855,677
    4-1C; 2,027,518
    4-1D; 1,296,306

7. Calcu. new Main Line as follows:
    75,000 ft. @ 19.60/ft. x 1.25 (for appurt.) = 1,837,500

WEB ATTACHMENT "B"

8. Based on analysis of rural contracts constructed to date, revise Phase 4 Design Report estimates by +11.0%.

Revise Design Report Est. Aberdeen service area from 2,786,816 to 2,187,694 based on M. Dunnaway's letter of 2/5/86. (Re: WEB 4-2A).

Also add 15% to Aberdeen area for increased sign-ups and add $500,000 for increased service area in the vicinity of Columbia and South.

Revised figures as follows:

(Aberdeen and
partial
Warner) 4-2A; 2,187,694 x 1.11 x 1.15 + 500,000 = 3,292,591
(Frederick) 4-2B; 2,450,502 x 1.11 = 2,720,057
(Warner) 4-2C; 2,586,182 x 1.11 = 2,870,662

9. Adjust Design Report by Dunnaway letter 2/5/86.
Design figure is adjusted by +9.0%, see note 10.

(400,000) (1.09) + 150,000 = 586,000

10. Based on analysis of Bids Received for Phase 1, 2, 3 Tanks increase estimate by 9%.

145,000 x 1.09 = 158,000

11. Based on analysis of Bids Received to Date increase Facility Estimate by 8%.

Control ; 630,000 x 1.08 = 680,400
O & M ; 220,000 x 1.08 = 237,600
Town Impr; 900,000 x 1.08 = 972,000

12. Revised estimates based on design report quantities and unit prices derived from analysis of recent bids. Also add $200,000 for expansion of Ashton service area in the vicinity of Miranda and $500,000 for expansion of Webster service area in the vicinity of Roslyn.

ENVIRONMENTAL ASSESSMENT

for

WEB RURAL WATER DEVELOPMENT PROJECT

Submitted By

WEB WATER DEVELOPMENT ASSOCIATION, INC.

September 1982

Prepared by
A Joint Venture of

B W | Bartlett & West Consulting Engineers
B E C | Boyle Engineering Corporation

FINDING OF NO SIGNIFICANT IMPACT

WEB Rural Water Development Project
WEB Water Development Association Inc.

Bureau of Reclamation
Upper Missouri Region
Billings, Montana

FONSI UM-82-4

The WEB Rural Water Development Project is authorized under Section 9 of the Rural Development Policy Act of 1980, to develop an adequate supply of good quality potable water for the residents of north central South Dakota. The United States Government, through the Secretary of the Interior, proposes to fund the project.

The project will include an intake station on Oahe Reservoir, a raw water pipeline, a water treatment facility, and a main transmission system. The water capacity will be 6.8 Mgal/d (million gallons per day), preferred plan, power requirements are estimated at 2,600,000 kWh annually, and the estimated transmission system includes approximately 3,600 miles of pipeline, 88 percent of which has a range of 1½ to 5 inches in diameter.

Based on the attached Environmental Assessment, we have concluded that the proposed action will have no significant environmental impact for the following reasons:

1. The water requirements of 6.8 Mgal/d (6,037 acre-feet per year) will have no detectable effect on existing or projected water requirements for Oahe Reservoir.

2. The impact on wetlands and cultural resources during the pipeline construction can be effectively mitigated. No sites on the National Register of Historic Places will be affected.

3. No impact is anticipated on threatened or endangered species.

4. No controversy is indicated in the written comments from agencies and groups.

5. Most of the pipeline will be installed in highway and road rights-of-way.

Recommended:

Regional Engineer — Date 9/24/82

Regional Environmental
Affairs Officer — Date 9-24-82

Approved:

Joseph B Marcotte
Regional Director — Date 9-24-82

1.0 PURPOSE AND NEED FOR RURAL WATER DEVELOPMENT PROJECT

1.1 WATER SUPPLY DEFICIENCIES

1.1.1 General

Development of an adequate good quality water supply has been a long term continuing effort of the residents of north central South Dakota. Since the source of an acceptable water supply has not been readily available to rural farm and town residents, more readily obtained poor quality ground water has been and is presently being utilized. Reliance upon this poor quality water imposes a continuing regional economic restraint in addition to the health related concerns.

1.1.2 Towns

Fifty-one (51) towns within this regional area indicated a need for a new water supply source. These 51 towns with an estimated population of 17,124 people represent 95 percent of the total town population in the region.

Thirty-five (35) of these towns presently maintain a public water supply system. The total estimated population served by these towns is 16,305 people. A list of all towns requesting a new water supply appears as Table 1.1.

Chemical analysis data for thirty-four of these systems is given in Tables 1.2 and 1.3. The tables show that certain chemical constituents in these existing public water sources exceed the Maximum Contaminant Levels (MCL) in the Interim, Primary and Secondary Drinking Water Regulations promulgated pursuant to P.L. 93-523 of the Safe Drinking Water Act. The primary MCL for fluoride is exceeded in 12 systems serving a total of 5,916 people. The secondary MCL's exceeded are as follows: Chloride - 13 systems, manganese - 20 systems, sulfate - 30 systems, and total dissolved solids - 34 systems. Also, 11 systems have hardness exceeding 300 ppm and 13 systems have sodium exceeding 250 ppm. One town has water with seven, 11 towns have at least six, 27 towns have at least five, 30 towns have at least four, and all 34 towns have at least three undesirable constituents in their existing water supplies.

1.1.3 Farm Residences and Livestock

Recent surveys of private water source and supply systems in the region show that the primary source of water is wells. A few households use dams, dugouts, cisterns or haul water. For livestock usage, dams and dugouts also are a significant source of supply.

In a survey of farm and open country residences in the study area, the desire for a better water source was expressed by 2925 residences through payment of a good intention fee. This showing of interest represents approximately 72 percent of the total residences. A further listing of potential water users by county is shown on Table 1.4. Data provided by this survey showed the following depth information for 2699 wells:

Shallow (< 100 feet)	25.7%
Intermediate (100 to 200 feet)	8.5%
Deep (> 200 feet)	65.8%

Because of the lack of uniform and reliable data, the quality of existing private facilities used by the farms and rural residences cannot be established. Generally, it is believed that the chemical quality of the private supplies is similar to the public supplies except possibly for nitrate. A study in 1975 of bacteria and nitrate contamination of farm wells in two southeast South Dakota counties found significant percentages of cisterns, shallow wells and intermediate wells that were contaminated and unsafe for human use. Since that study area is removed from the WEB area, the results do not apply directly. However, nitrate and bacteria contamination of private drinking water sources in the WEB area probably does exist. This is of particular concern because these supplies are not regularly tested like the public supplies.

1.2 GROUNDWATER DATA

1.2.1 General

Both bedrock and glacial aquifers are utilized as an existing water source for region residents. In general, the quality of waters from both sources are poor and/or yields inadequate. There are, however, small isolated known locations of water having acceptable quality and adequate yield for local area users.

1.2.2 Bedrock Aquifers

Underlying the entire region are fine to very fine grained sandstones of at least nine distinct formations. The upper water bearing Dakota, Fall River and Sundance formations serve as a groundwater aquifer for area residents. The depth to these upper formations varies from 850 to 2100 feet. Their combined thickness varies from 250 to 550 feet. Prior to development as sources of water, the bedrock aquifers contained water under artesian pressure exceeding 250 psi at the land surface in Brown and Spink Counties. Development of these aquifers during the last 90 years has caused a significant and rapid drop in head. Between 1900 and 1970 the head near Aberdeen declined by about 390 feet. Geologists and hydrologists have not been able to determine the source of recharge to these bedrock aquifers.

The decline in artesian pressure has decreased natural flow well yields. Around the year 1900, yields in Brown County reportedly ranged from 300 to 1,060 gpm. In 1973 the average well flow was about 3 gpm and some wells have ceased to flow. The decrease in head in the Dakota aquifer has caused the head in the Fall River and Sundance aquifers to fall also. Where significant head differences between these aquifers exist, or have existed, mixing of the water takes place. This is particularly the case in Brown and Spink counties.

The water from bedrock wells contain high concentrations of minerals and the quality is regarded as poor. Table 1.2 contains data on 34 public systems wells developed in the sandstone formations. The iron concentration ranges from <0.1 to 3.2 ppm and equals or exceeds 0.3 (secondary MCL) in 22 wells. Likewise the manganese concentration ranges from <0.02 to 0.24 ppm and equals or exceeds 0.05 (secondary MCL) in 17 wells. Similarly the table shows that: Fluoride exceeds 2.4 ppm (primary MCL) in 17 wells, sulfate exceeds 250 ppm (secondary MCL) in 33 wells, chloride exceeds 250 ppm (secondary MCL) in 15 wells, total dissolved solids exceeds 500 ppm (secondary MCL) in all 34 wells (range 1901-3678 ppm), sodium exceeds 250 ppm in 30 wells, and total hardness exceeds 300 ppm in 8 wells.

In some instances conventional treatment for iron and manganese removal could affect improvement in the quality of water from the bedrock aquifers. However, such treated water would still exceed standards for several other constituents. Desalination of the water from the bedrock aquifers would be required to meet all standards for public water supplies.

1.2.3 Glacial Aquifers

A complex system of glacial aquifers is present in the region. Some investigators separate glacial aquifers into "shallow" and "buried" or "deep". There are areas where two or even three aquifers may be present at the same horizontal location. The shallow and deep aquifers may at times be hydraulically connected. Some glacial aquifers occur under artesian conditions, some under water table conditions, and some under both (different areas). Recharge into glacial aquifers generally comes from the surface as water that falls as rain or snow and percolates into the aquifer. In some areas there is significant recharge from streamflow. There are also locations where recharge is occurring through improperly sealed or perforated casing wells which penetrate glacial aquifers and are developed in bedrock aquifers. It is difficult to make general statements about glacial aquifers because of their highly diverse nature. The particle size, gradation and thickness of the outwash sands and gravels is extremely variable. There have been instances where well yield varies by a factor of two over as short a horizontal distance as 20 feet. Extreme quality variations are also present. However, in general the quality of the water in the glacial aquifers is somewhat better than that in the bedrock aquifers.

Summaries of possible yield and quality data are given in Table 1.5. The quality data for water from 38 public system wells currently utilizing glacial aquifers as sources appears in Table 1.3. In these, the iron concentration ranges from 0.2 to 9.5 ppm and equals or exceeds

0.3 (secondary MCL) in 24 wells. Likewise the manganese concentration ranges from <0.02 to 1.61 and equals or exceeds 0.05 (secondary MCL) in 35 wells. Similarly the table shows that fluoride exceeds 24 ppm (primary MCL) in 1 well, sulfate exceeds 250 ppm (secondary MCL) in 23 wells, chloride exceeds 250 ppm (secondary MCL) in 17 wells, total dissolved solids exceeds 500 ppm (secondary MCL) in 36 wells (range 437-1800 ppm), sodium exceeds 250 ppm in 17 wells; and total dissolved hardness exceeds 300 ppm in 19 wells.

There are a number of instances where conventional treatment for iron and manganese removal could affect improvement in the quality of water from the glacial aquifers. However, such treated water would still exceed standards for at least several other constituents. There are two towns in which conventional treatment consisting of disinfection, softening, and manganese or iron removal (one of the two) would produce water meeting all primary and secondary standards. These towns are Selby and Hoven. The town of Java is within the WEB service area but has not joined the WEB project. Java could, with conventional treatment, obtain water meeting all the standards except for sulfate. The towns of Eureka and Waubay are outside, but adjacent to the WEB service area. They could treat their water by the same conventional methods and meet all standards.

The City of Aberdeen, the largest population center in the region, has utilized groundwater from sand pits in the Elm aquifer during droughts. They have several water rights and future use permits for Elm aquifer water in the area along the Elm river northwest of the city. The available water quality data from that area indicates that with conventional treatment, standards would be met.

For other than the above mentioned sources, desalination treatment would be required of water being used from the regions glacial aquifers in order to comply with all standards.

1.3 AREA OF NEED

1.3.1 Organization

Residents of the north central region of South Dakota east of the Missouri River began to organize in the early 1970's in an effort to solve their water quality and supply problems. The rural water system development program as administered by the federal Farmer's Home Administration (FmHA) was being used in other areas of the state and midwest to provide needed water supplies and appeared to be applicable to this region. Interested parties from Walworth, Edmunds and Brown counties formed the original study group and the project acronym (WEB) was derived from these county names. Additional interested parties were added to the WEB organization from Day, Spink, Campbell, Faulk, Potter and McPherson counties as WEB activities proceeded.

The present WEB planning organization is a non-profit corporation governed by a nine member board of directors. These board of directors are elected from members of the county rural water steering committees and town councils.

WEB Water Development Association, Inc.

TABLE 1.2

CHEMICAL DATA OF EXISTING PUBLIC SOURCES FROM BEDROCK WELLS

Town	Well No. or Name	Date of Sample	Langelier Index @ 50°F	pH	P Alkalinity ppm	T Alkalinity ppm	Total Hardness $CaCO_3$ ppm	Calcium Ca ppm	Magnesium Mg ppm	Bicarbonate HCO_3 ppm	Sulfate SO_4 ppm	Iron Fe ppm	Manganese Mn ppm	Sodium Na ppm	Potassium K ppm	Chloride Cl ppm	Fluoride F ppm	Nitrate NO_3 as N ppm	Total Solids ppm
Ferney	1	1/78	-0.57	7.9	0	254	38	10	3	310	1080	0.3	0.05	738	9	171	3.3	1.8	2205
Groton	School	1/78(T)	-0.60	7.4	0	127	253	69	20	155	1220	0.5	0.10	604	19	125	1.9	0.1	2195
	RR-Sby	3/78(R)	0.00	8.2	0	189	93	26	7	231	1170	0.3	0.06	685	12	146	2.2	<0.1	<2149
	Streeter	1/78(T)	-0.82	7.2	0	181	168	40	17	221	1260	2.3	0.24	706	18	146	1.8	0.1	2363
	Tower	1/78(R)	-0.02	8.1	0	177	118	32	9	216	1140	0.9	0.06	670	14	148	2.3	< 0.0	2161
Mansfield	N-RR	5/78	+0.03	8.5	-	227	42	12	3	271	610	0.2	0.06	668	10	461	1.7	<0.1	1979
	S-City	5/78	+0.02	8.4	-	230	49	14	4	276	620	0.1	0.05	669	10	477	1.6	0.1	1949
Stratford	1	1/78	+0.05	8.0	0	168	206	54	17	205	1030	0.1	0.09	654	17	295	1.4	<0.1	2190
Warner San. Dist.	3 Wells	2/77(C)	-0.35	8.0	0	206	53	16	4	251	970	0.7	0.06	693	9	210	2.4	1.4	2075
Mound City	1	11/76	+0.07	7.4	0	134	1025	273	84	163	1310	0.8	0.20	259	21	124	2.9	< 1	2310
Ipswich	1	10/73	-	7.3	0	122	1227	343	89	149	1309	2.0	0.10	128	19	48	2.7	< 1	2172
	2	11/76	+0.07	7.3	0	139	1178	330	86	170	1260	1.6	0.15	125	21	51	2.9	< 1	2150
	3	11/76	+0.02	7.2	0	139	1199	333	89	170	1268	2.7	0.14	117	20	52	3.0	< 1	2149
Roscoe	1	11/76	+0.12	8.2	0	702	43	9	5	856	480	0.3	0.02	806	11	405	3.0	< 1	2188
	2	9/74	-	7.8	0	518	183	51	12	632	0	3.3	0.14	1322	19	1822	0.4	< 1	3678
Cresbard	1 & 2	11/77(C)	+0.20	7.9	0	551	114	27	12	672	370	0.1	<0.02	770	15	580	2.4	1.0	2144
Orient	1	11/76	+0.16	7.3	0	136	1344	388	91	163	1300	3.2	0.17	88	21	67	3.1	< 1	2228
Rockham	1	11/76	-0.16	8.3	0	416	26	7	2	508	610	0.2	0.03	704	7	333	3.3	1.7	1955
Zell	1	2/77	-0.51	8.1	0	427	17	4	2	521	610	0.1	0.03	685	6	267	4.0	1.8	1901

WEB Water Development Association, Inc.

TABLE 1.2 (Con't)

CHEMICAL DATA OF EXISTING PUBLIC SOURCES FROM BEDROCK WELLS

Town	Well No. or Name	Date of Sample	Langelier Index @ 50°F	pH	P Alkalinity ppm	T Alkalinity ppm	Total Hardness $CaCO_3$ ppm	Calcium Ca ppm	Magnesium Mg ppm	Bicarbonate HCO_3 ppm	Sulfate SO_4 ppm	Iron Fe ppm	Manganese Mn ppm	Sodium Na ppm	Potassium K ppm	Chloride Cl ppm	Fluoride F ppm	Nitrate NO_3 as N ppm	Total Solids ppm
Leola	1	11/77	+0.32	8.1	0	679	80	19	8	828	340	0.1	<0.02	803	17	552	2.2	<0.1	2194
	2	11/77	+0.23	8.0	0	614	90	22	9	749	360	0.8	<0.02	772	17	529	2.2	0.1	2143
Wetonka	1	5/78	+0.56	8.5	10	562	69	16	7	661	300	<0.1	<0.02	902	18	828	2.5	3.3	2556
Ashton	S-1	2/57	-	7.6	0	150	752	203	59	183	1258	1.4	<0.02	350	25	75	2.2	< 1	2178
	E-2	2/57	-	8.1	2	186	426	112	35	227	1159	2.1	<0.02	575	13	212	2.4	< 1	2285
	N-4	5/78(C)	+0.14	7.7	0	148	589	163	44	181	1190	0.1	0.07	416	21	130	1.8	0.1	2237
Brentford	E & W	11/77(C)	-0.24	8.1	0	216	60	17	4	264	1130	0.3	2.04	744	10	197	2.4	<0.1	2202
Conde	N-2	3/77	-0.05	8.4	0	323	32	9	3	394	1030	0.6	0.03	825	9	284	3.8	<0.1	2313
Doland	1	1/75	-	-	0	263	31	8	3	321	1000	0.4	0.04	730	8	206	2.8	< 1	2140
	2	10/76(C)	-0.37	8.1	0	267	35	10	3	326	973	0.2	0.02	777	11	293	2.7	< 1	2210
Mellette	N & S	2/77(C)	-0.36	8.3	0	268	26	6	2	327	725	1.1	0.04	693	8	322	2.6	<0.1	1988
Northville	1	11/77	-0.20	8.4	0	413	18	5	2	504	580	0.2	0.02	727	7	397	3.2	<0.1	1997
Redfield	East	11/67	-	7.2	0	212	173	48	13	259	1095	0.6	<0.02	653	11	178	2.8	3.0	2130
	West	11/67	-	7.9	0	230	114	33	7	280	1096	1.4	<0.02	699	11	200	3.0	< 1	2224
		1/75(TC)	-	-	0	207	132	35	11	253	1030	0.3	0.05	680	11	196	2.4	< 1	2179

(T) - Treated Water
(T*) - Treated Water Partially Softened
(R) - Untreated Water
(C) - Composite Sample

WEB Water Development Association, Inc.

TABLE 1.2 (Con't)

CHEMICAL DATA OF EXISTING PUBLIC SOURCES FROM BEDROCK WELLS

Town	Well No. or Name	Date of Sample	Langelier Index @ 50°F	pH	P Alkalinity ppm	T Alkalinity ppm	Total Hardness CaCO3 ppm	Calcium Ca ppm	Magnesium Mg ppm	Bicarbonate HCO3 ppm	Sulfate SO4 ppm	Iron Fe ppm	Manganese Mn ppm	Sodium Na ppm	Potassium K ppm	Chloride Cl ppm	Fluoride F ppm	Nitrate NO3 as N ppm	Total Solids ppm
Leola	1	11/77	+0.32	8.1	0	679	80	19	8	828	340	0.1	<0.02	803	17	552	2.2	<0.1	2194
	2	11/77	+0.23	8.0	0	614	90	22	9	749	360	0.8	<0.02	772	17	529	2.2	0.1	2143
Wetonka	1	5/78	+0.56	8.5	10	562	69	16	7	661	300	<0.1	<0.02	902	18	828	2.5	3.3	2556
Ashton	S-1	2/57	-	7.6	0	150	752	203	59	183	1258	1.4	<0.02	350	25	75	2.2	< 1	2178
	E-2	2/57	-	8.1	2	186	426	112	35	227	1159	2.1	<0.02	575	13	212	2.4	< 1	2285
	N-4	5/78(C)	+0.14	7.7	0	148	589	163	44	181	1190	0.1	0.07	416	21	130	1.8	0.1	2237
Brentford	E & W	11/77(C)	-0.24	8.1	0	216	60	17	4	264	1130	0.3	2.04	744	10	197	2.4	<0.1	2202
Conde	N-2	3/77	-0.05	8.4	0	323	32	9	3	394	1030	0.6	0.03	825	9	284	3.8	<0.1	2313
Doland	1	1/75	-	-	0	263	31	8	3	321	1000	0.4	0.04	730	8	206	2.8	< 1	2140
	2	10/76(C)	-0.37	8.1	0	267	35	10	3	326	973	0.2	0.02	777	11	293	2.7	< 1	2210
Mellette	N & S	2/77(C)	-0.36	8.3	0	268	26	6	2	327	725	1.1	0.04	693	8	322	2.6	<0.1	1988
Northville	1	11/77	-0.20	8.4	0	413	18	5	2	504	580	0.2	0.02	727	7	397	3.2	<0.1	1997
Redfield	East	11/67	-	7.2	0	212	173	48	13	259	1095	0.6	<0.02	653	11	178	2.8	3.0	2130
	West	11/67	-	7.9	0	230	114	33	7	280	1096	1.4	<0.02	699	11	200	3.0	< 1	2224
		1/75(TC)	-	-	0	207	132	35	11	253	1030	0.3	0.05	680	11	196	2.4	< 1	2179

(T) - Treated Water
(T*) - Treated Water Partially Softened
(R) - Untreated Water
(C) - Composite Sample

WEB Water Development Association, Inc.

TABLE 1.3

CHEMICAL DATA OF EXISTING PUBLIC SOURCES FROM GLACIAL AQUIFER WELLS

Town	Well No. or Name	Date of Sample	Langelier Index @ 50°F	pH	P Alkalinity ppm	T Alkalinity ppm	Total Hardnes CaCO$_3$ ppm	Calcium Ca ppm	Magnesium Mg ppm	Bicarbonate HCO$_3$ ppm	Sulfate SO$_4$ ppm	Iron Fe ppm	Manganese Mn ppm	Sodium Na ppm	Potassium K ppm	Chloride Cl ppm	Fluoride F ppm	Nitrate NO$_3$ as N ppm	Total Solids ppm
Mound City	2-Sby	7/64	-	7.5	0	642	278	16	20	783	529	0.3	0.60	455	11	54	0.3	< 1	1636
Pollock	1	10/66	-	7.5	0	700	.321	78	28	854	227	6.0	0.02	340	13	94	0.2	1.3	1335
	2	8/74	-	7.3	0	731	317	80	27	892	188	2.4	0.12	357	11	111	0.3	0.1	1292
	3	9/76	+0.36	7.5	0	661	317	80	28	806	204	2.1	0.07	339	12	98	0.3	< 1	1244
Andover (Aluvial)	E-1	7/75	+0.38	7.4	0	346	921	211	96	422	816	1.2	0.54	160	9	19	0.3	< 1	1763
(Aquifer)	W-2	7/75	+0.34	7.4	0	340	847	192	89	415	838	0.2	0.52	170	8	25	0.3	< 1	1699
Bristol	1	10/77	+0.70	7.7	0	321	925	228	86	392	790	0.8	0.90	106	8	12	0.2	0.4	1601
	3	10/77	+0.69	7.7	0	320	916	226	86	390	800	0.5	0.90	106	9	12	0.2	0.5	1597
Roslyn	Old	5/70		8.0	0	383	412	111	32	467	377	0.8	0.33	223	11	76	0.4	3.0	1128
	New	9/75	+0.55	7.8	0	476	408	96	41	476	378	0.1	0.31	219	12	56	0.3	< 1	1118
Webster	1	3/60	-	7.6	0	292	802	184	83	356	709	0.2	0.80	138	11	14	0.7	< 1	1431
	3	3/60	-	7.6	0	245	787	187	77	299	724	1.0	0.90	104	10	10	0.7	< 1	1384
	4	3/60	-	7.6	0	244	788	193	73	298	765	1.4	0.90	102	9	7	0.7	< 1	1387
	5	4/60	-	7.6	0	268	985	223	103	327	912	1.3	1.10	124	12	23	0.7	< 1	1800
	6	12/76(R)	+0.43	7.6	0	259	788	181	82	316	776	0.6	1.41	115	11	15	0.4	< 1	1499
	5,6	12/76(T°C)	-0.80	7.4	0	70	366	66	49	85	730	< 0.1	< 0.02	223	11	18	0.9	< 1	1217
Bowdle	1	11/76(R)	-0.08	7.5	0	278	269	65	26	339	78	< 0.1	0.68	54	16	27	0.3	< 1	475
	2	11/76(R)	+0.04	7.4	0	248	469	115	44	303	302	3.8	0.21	57	19	39	0.3	< 1	811
	3	11/76(R)	+0.02	7.6	0	270	266	66	25	329	98	0.4	0.81	71	16	46	0.4	< 1	514
	4-Sby	1/75(R)	-	-	0	273	238	55	23	333	89	2.6	0.80	65	15	32	0.6	< 1	500
	5	9/65	-	7.9	0	272	725	198	56	332	254	0.3	< 0.02	46	9	74	0.1	5.0	1228
	6	11/76(R)	-0.05	7.5	0	279	283	65	29	340	71	< 0.1	0.09	31	15	6	0.5	< 1	437
Hosmer	1,2,3	2/74(RC)	-	7.5	0	164	47	12	4	200	235	0.2	0.10	304	5	208	1.3	< 1	905
	1,2,3	2/74(T°C)	-	7.8	0	160	48	12	4	195	250	0.3	0.10	300	5	209	1.5	< 1	904

WEB Water Development Association, Inc.

TABLE 1.3 (con't)

CHEMICAL DATA OF EXISTING PUBLIC SOURCES FROM GLACIAL AQUIFER WELLS

Town	Well No. or Name	Date of Sample	Langelier Index @ 50°F	pH	P Alkalinity ppm	T Alkalinity ppm	Total Hardness CaCO$_3$ ppm	Calcium Ca ppm	Magnesium Mg ppm	Bicarbonate HCO$_3$ ppm	Sulfate SO$_4$ ppm	Iron Fe ppm	Manganese Mn ppm	Sodium Na ppm	Potassium K ppm	Chloride Cl ppm	Fluoride F ppm	Nitrate NO$_3$ as N ppm	Total Solids ppm
Faulkton	1,2	11/77(C)	+0.20	7.9	0	500	107	29	8	610	354	0.6	0.10	486	8	208	0.5	< 1	1415
	2	12/73(R)	-	8.0	0	510	120	33	9	622	357	0.7	0.20	490	9	219	0.5	< 1	1433
	3	11/76(RC)	+0.26	7.9	0	464	127	35	10	566	354	0.7	0.19	459	9	211	0.5	< 1	1402
Onaka	1	1/75	-	-	0	406	206	58	10	495	393	9.5	1.32	469	13	312	0.5	< 1	1596
	2	1/75	-	-	0	316	50	14	3	386	358	0.2	0.18	455	7	240	0.3	< 1	1262
	3	1/75	-	-	0	327	18	2	0	399	260	5.6	0.21	474	8	219	0.4	< 1	1523
		11/76(C)	+0.06	8.0	0	337	86	25	6	411	342	0.1	0.34	456	10	273	0.4	< 1	1323
Seneca	1	12/69	-	7.6	0	133	117	36	6	162	420	0.3	0.70	308	9	180	0.5	< 1	1139
	2-New	9/77	-0.11	8.0	0	146	115	39	7	178	370	0.3	0.52	340	10	217	0.4	0.1	1120
	3-Old	6/75(R)	-	7.2	0	155	175	52	11	189	402	0.8	0.83	331	10	238	0.5	< 1	1187
Hoven	W-1	4/76(T)	+0.11	7.3	0	271	438	125	31	331	189	<0.1	1.61	45	8	34	1.4	0.8	662
	M-2	12/65(R)	-	7.8	0	248	400	104	34	303	249	<0.1	<0.02	62	6	29	0.3	5.0	761
	East	4/76(R)	+0.24	7.2	0	365	504	141	37	445	199	0.1	1.38	58	8	19	3.2	2.8	760
	North	1/76(T)	-0.13	7.2	0	310	349	97	26	378	132	< 0.1	1.47	50	7	28	0.5	< 1	570
Glenham	North	11/76	+0.10	7.4	0	686	220	58	18	837	523	0.5	1.05	500	11	56	0.4	< 1	1588
	S-Sby	11/76	+0.14	7.4	0	688	226	61	18	839	496	1.0	1.01	496	11	56	0.4	< 1	1595
Selby	North	8/74	-	7.4	0	288	393	94	37	351	207	1.9	1.16	52	8	7	0.3	< 1	682
	South	8/74	-	7.4	0	299	409	95	40	365	225	2.4	0.95	65	9	7	0.3	< 1	705

(T) - Treated Water
(T*) - Treated Water Partially Softened
(R) - Untreated Water
(C) - Composite Sample

WEB Water Development Association, Inc.

TABLE 1.5

GLACIAL AQUIFER AND GROUNDWATER DATA

Aquifer	Nominal Maximum Thickness (feet)	Yield (gpm)	Sulfate (ppm)	Chloride (ppm)	Iron (ppm)	Manganese (ppm)	Total Dissolved Solids (ppm)	Specific Cond. (micromhos/cm)	Hardness ($CaCO_3$ ppm)
Deep James	40	500	8-460	170-970				1,530-3,400	210-520
Middle James	40	500	80-1,300	12-1200	0.2-20	0.2-1.5		679-3,000	180-1,500
Elm	40	500	4-4,000	8-790	0.1-4.9	0.2-0.6		246-5,900	78-3,300
Spring Creek	25	300	Avg. 221	Avg. 36	Avg. 0.22	Avg. 0.44		Avg. 1,141	Avg. 459
Selby	60	333	Avg. 221	Avg. 36	Avg. 0.22	Avg. 0.44		680-1,740	190-660
Grand	175	880	Avg. 279	Avg. 71	Avg. 2.53	Avg. 0.31	740-3,330		50-1,700
Bowdle	50	250	78-302	6-74	<0.01-3.8	<0.02-1.61		420-1,900	200-640
Java	69	50	283	7	0.4	0.03	350-810		230-610
Hillsview	40	200						1,100-1,660	36-630
Onaka	95	480	260-393	240-319	0.1-9.5	0.18-1.32	1,262-1,596		18-206
Twin Lakes	40	200						2,400-2,900	1,300-1,400
Tulare	124	1000	90-630	20-65	<0.05-2.7	<0.05-2.75	200-1,800		546-1,008
Lynn	65	500	225-670	4-243	0.03-0.33	0.01-0.63	750-3,332		417-970
Eastern Lakes	20	500[1]	35-1,000	1-81	0.1-2.5	0.01-0.94	200-2,000		170-1,200

[1] If direct hydraulic connection to lake

WEB Water Development Association, Inc.

TABLE 2.1

CHEMICAL DATA OF MISSOURI RIVER WATER FROM LAKE OAHE

Source of Sample	Date of Sample	Langelier Index @ 50°F	pH	P Alkalinity ppm	T Alkalinity ppm	Total Hardness $CaCO_3$ ppm	Calcium Ca ppm	Magnesium Mg ppm	Bicarbonate HCO_3 ppm	Sulfate SO_4 ppm	Iron Fe ppm	Manganese Mn ppm	Sodium Na ppm	Potassium K ppm	Chloride Cl ppm	Fluoride F ppm	Nitrate NO_3 as N ppm	Total Solids ppm
Eagle Butte - Town	1/78 (T)	+0.34	8.2	0	155	242	60	23	189	20[illegible]	0.1	0.03	69	5	15	0.5	0.1	509
Gettysburg - Town	4/76 (R)	+0.77	8.3	0	141	205	50	19	172	167	0.1	<0.02	58	4	5	0.5	< 1	413
	4/76 (T*)	+1.37	9.6	0	64	116	39	5	78	162	<0.1	<0.02	63	4	15	0.5	< 1	341
Mobridge - Town	7/69 (R)	-	7.9	0	150	209	60	14	183	176	<0.1	<0.02	62	4	2	0.5	< 1	438
	4/77 (T*)	+0.97	9.4	12	78	119	29	11	65	164	<0.1	<0.02	59	4	11	1.3	<0.1	329
FoxRidge - Rural Water System	2/76	+0.30	8.2	0	153	228	56	21	187	205	0.1	<0.02	66	4	12	0.5	< 1	471
Powerhouse - Federal	11/65 (R)	-	8.2	0	154	236	59	21	188	243	<0.1	<0.02	87	4	6	0.6	< 1	550
Swiftbird Job Ctr. - Federal	11/67 (R)	-	8.1	9	174	230.	60	19	212	192	0.2	0.10	68	5	8	0.6	< 1	511
	11/67 (T*)	-	8.4	6	112	203	45	22	137	220	<0.1	0.50	68	5	10	0.1	< 1	485
Typical WEB (no softening)						222				197	<0.1	<0.02	68		13	1.2		477
Typical WEB (with softening)						110				197	<0.1	<0.02	68		13	1.2		400

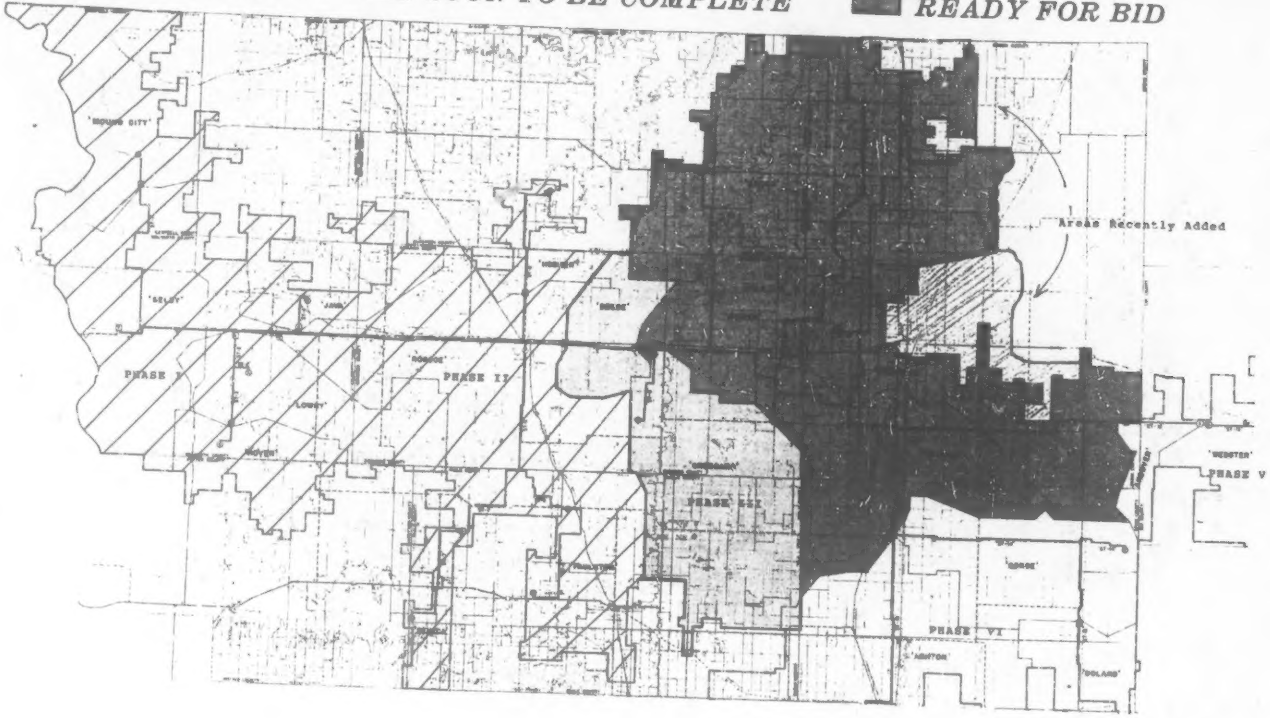
(T) = Treated Water
(T*) - Treated Water Partially Softened
(R) - Untreated Water

WEB CONSTRUCTION PROGRESS

▨ *AREA COMPLETE READY FOR USE*

☐ *AREA UNDER CONTRACT SOON TO BE COMPLETE*

■ *AREA READY FOR BID*


'MOUND CITY'
'SELBY'
'JAVA'
'HOBSON'
'ROSCOE'
PHASE I
PHASE II
'LOWRY'
'HOVEN'
PHASE III
Areas Recently Added
'WEBSTER'
PHASE V
PHASE VI
'ASHTON'
'DOLAND'

Mr. **Daschle**. No one makes better pipe than does the company in your Congressional District from which much of our WEB pipe comes.

Mr. **Bevill**. How much was that you needed?

Mr. **Daschle**. The more pipe you can give us, the more we can use.

Mr. **Bevill**. We will certainly work with you.

[The following was provided for the record:]

STATEMENT

OF

DARYLD WILLIAMSON, PRESIDENT

BOARD OF DIRECTORS, BELLE FOURCHE IRRIGATION DISTRICT

NEWELL, SOUTH DAKOTA

AT

HEARINGS BEFORE THE APPROPRIATIONS SUB-COMMITTEE ON
ENERGY AND WATER DEVELOPMENT
UNITED STATES HOUSE OF REPRESENTATIVES
FOR APPROVAL OF 3.9 MILLION DOLLARS
FOR FISCAL YEAR 1987 TO CONTINUE WORK SCHEDULED
BY THE UNITED STATES BUREAU OF RECLAMATION
FOR REHABILITATION OF BELLE FOURCHE PROJECT

April 14, 1986

MR. CHAIRMAN AND MEMBERS OF THE SUB-COMMITTEE:

For the record, I, Daryld Williamson, President of the Board of Directors of Belle Fourche Irrigation District, Newell, South Dakota, request your approval of funds in the amount of 3.9 million dollars, which have been approved by the President and included in the budget for fiscal year 1987.

The Bureau of Reclamation has scheduled the following work to be done in fiscal 1987:

To complete collection of design data and initiate design for Diversion Dam,

Issue specifications and construct major structures on the North and South Canals;

Complete construction of Shaw-Baldwin laterals (convert open ditch to pipeline);

Initiate construction on other major laterals, and

Continue installation of pipe on minor laterals.

We appreciate the support we have already received in the approval of funds to get construction started on the Belle Fourche Project. Rehabilitation must proceed in a continuous and orderly manner and it is expedient that funds will be available to efficiently proceed with construction.

Modernization and improvement of project facilities is needed to:

(1) Restore the reliability of the system;

(2) Reduce annual operation and maintenance costs;

(3) Conserve irrigation water by a reduction of seepage losses and operational wastes;

(4) Provide measuring devices for the equitable and efficient distribution of the water supply;

(5) Provide safety features for the protection of human life;

(6) Restore design capacity to the system to avoid overloading it and thus eliminate the risk of system failure;

(7) Reclaim agricultural lands affected by seepage losses; and

(8) Insure the continued social and economic welfare of the area.

The Board of Directors will continue to work closely with the Bureau of Reclamation to set priorities in order to make the most efficient use of funds.

In closing Mr. Chairman, I ask your support in approval of funds for the continuing progress of rehabilitation of the Belle Fourche Project.

WEDNESDAY, APRIL 16, 1986.

LAS VEGAS WASH AND TRIBUTARY STUDY, NEVADA

CLARK COUNTY (NEVADA) REGIONAL FLOOD CONTROL DISTRICT

WITNESSES

BRUCE WOODBURY, COMMISSIONER, CLARK COUNTY, NEVADA

VIRGINIA BAX, GENERAL MANAGER, CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT

Mr. BEVILL. Mr. Woodbury, we will be pleased to hear from you.

Mr. WOODBURY. Thank you, Mr. Chairman.

My name is Bruce Woodbury, member of the Board of County Commissioners of Clark County, Nevada, and Chairman of the County Regional Flood Control District Board.

I am privileged to be here today to address what has become the most severe problem facing Clark County, Nevada in terms of our local governmental needs today, and that is the destruction that we experience virtually every year from flooding throughout the entire country.

Present with me is the Chief Engineer and General Manager of the Regional Flood Control District, Virginia Bax.

For the past three years, we have suffered untold millions of dollars of flood damage. With our rapid urbanization and growth, our flooding problems have intensified dramatically.

In the floods of 1983 and 1984, damage to public property exceeded $9 million, and private property damage and business losses were several times that amount. More significantly, seven lives were lost in the raging flood waters that repeatedly swept through Clark County and the incorporated cities in Clark County. In September 1984, the President declared Clark County a Federal Disaster Area.

The problems threaten to become much worse in the future. Clark County is the third fastest growing metropolitan area in the Nation. We have tripled our population since 1959 and currently have over 580,000 residents. This will increase to almost a million by the turn of the century.

The configuration of the Las Vegas valley, which includes numerous alluvial fans, is such that much of the population is situated in flood-prone areas, and many neighborhoods which had previously been free of flooding were devastated in the 1984 disasters.

Clark County's flood control needs are estimated to total several hundred million dollars, and local resources are clearly insufficient to fund such a massive undertaking.

Clark County and the incorporated cities in Clark County have worked diligently with limited resources in an attempt to solve our flooding problems independently. In 1981, for example, Clark County residents approved a $32 million bond issue for flood control improvements.

After the 1984 floods, another $15 million in short-term bonds were set aside for flood control needs, most of which went for repairs to public facilities.

In 1985, flood control was named the number one legislative priority for Clark County, and in response, the Nevada Legislature created the Clark County Regional Flood Control District.

Legislators assessed Clark County property owners to raise funds to develop a master plan and to operate the District for the period of two years. This included matching funds for the U.S. Army Corps of Engineers feasibility study for the Las Vegas Valley.

The legislation provided the Clark County Commission with the option of placing on the ballot either a property tax increase or a one-fourth of a cent sales tax increase to fund flood control improvements.

The County Commission, after holding two public hearings and at the recommendation of a citizens' advisory council, chose the sales tax as the funding option.

An amount in excess of $12 million per year would be provided through this tax. It will be on the ballot this September for voter approval. We are campaigning very hard for a "yes" vote, and all indications are that there will be strong community support for the proposal.

Both political parties in Clark County along with business, labor and numerous citizens' groups are on record in support of this manner of taxing ourselves to help solve the problem.

Despite the local support for flood control efforts, we will be only able to provide a portion of our immense flood control funding needs. We have over the past several years been working closely with the U.S. Army Corps of Engineers to develop a program to resolve our flood control problems.

In the initial "reconnaissance" phase, the Corps determined that there was a definite Federal interest in solving the flood control problems in the Las Vegas Valley in Clark County.

We are currently in the "feasibility" phase of the Corps program, which will define and determine the cost of our flood control requirements. As you well know, the feasibility phase requires cost sharing: 50 percent Federal, 50 percent local.

In July of 1985, the Clark County Regional Flood Control District entered into a cost sharing agreement with the Corps. The District has already expended $67,500 for our share of the match for fiscal years 1986 and 1987. We are thus irrevocably committed to working with the Corps to help solve our severe flooding problems.

With voter approval of the sales tax increase in September, we will be able to provide some of the resources needed to fund flood control capital construction.

Preliminary estimates for the master plan facilities and the anticipated revenue from a sales tax increase, however, indicate that without Federal involvement, some areas of the county will have to do without flood protection indefinitely.

Not only will these areas get little or no protection, but their problems will worsen as our growth continues.

The citizens of Clark County are committed to a comprehensive program of flood control. We have demonstrated that we are willing to fund as much for flood control as our resources and other requirements permit.

Assistance from the U.S. Army Corps will, however, provide the needed infusion of funding to make the difference between success and failure in our program. I believe that any fair and objective evaluation of our needs and our local effort to meet those needs would clearly indicate that Clark County, Nevada should be high on any priority list for Federal flood control assistance.

We urge you, therefore, to support the continued funding for the Corps of Engineers "feasibility study" for fiscal year 1987 and beyond for Clark County, Nevada.

We are also aware of the House Water Resources bill passed late last year, November 13, 1985, H.R. 6, and the recently passed Senate Water Resources bill. The House version identifies $80 million for the Las Vegas project, while the Senate indicates none.

We are very concerned as this legislation progresses into conference committee, and urge the House to continue its support of this much-needed project when you get into conference negotiations.

Thank you very much for the opportunity. If you have any questions, Ms. Bax and I will be happy to attempt to answer them.

[The information provided by Mr. Woodbury follows:]

FORMAL ~~FEDERAL~~ ENDORSEMENTS TO DATE OF QUARTER CENT SALES TAX FOR FLOOD CONTROL

Clark County Republican Platform

Clark County Democratic Party Platform

Moapa Valley Chamber of Commerce

Enterprise Town Board

Citizens Committee on Efficiency and Cost Reduction in Clark County Government

Paradise Town Board

Las Vegas Republican Men's Club

Southern Nevada Central Labor Council

East Las Vegas Town Board

Nevada State AFL-CIO and Member~~s~~ Unions

Southern Nevada Homebuilders Association

Clark County Commission

City of Las Vegas City Council

City of Henderson City Council

City of North Las Vegas City Council

City of Boulder City City Council

City of Mesquite City Council

Sunrise Manor Town Board

Assembly Bill No. 169—Assemblymen McGaughey, Thompson, Schofield, Bilyeu, Bergevin, Banner, Horne, Williams, Kerns, Zimmer, Ham, Coffin, DuBois, Arberry, Little, Collins, Francis, Rader, Tebbs, Roberts, Malone, Sedway, Price, Bogaert, Humke, Dini, Jeffrey, Nevin, O'Donnell, Lambert, Spriggs, Craddock, Joerg, Getto, Swain, Stone, Sader, Nicholas, Thomas, Beyer and Marvel

CHAPTER..........

AN ACT relating to the control of floods; granting additional powers to a district for that purpose; changing the composition of the board of directors; authorizing the levy of an assessment to pay for certain improvements; and providing other matters properly relating thereto.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. Chapter 543 of NRS is hereby amended by adding thereto the provisions set forth as sections 2 to 14, inclusive, of this act.

Sec. 2. *"Acquisition" includes extension, alteration, reconstruction, repair or other improvement by purchase, construction, installation, reconstruction, condemnation, lease, rent, gift, grant, bequest, devise, contract or other means, or any combination thereof. "Acquire" has a correspondingly extensive meaning.*

Sec. 3. *"Board" means the board of directors of a district.*

Sec. 4. *"District" means any district for the control of floods organized or, in the case of organizational provisions, proposed to be organized, pursuant to NRS 543.160 to 543.830, inclusive, and sections 2 to 14, inclusive, of this act.*

Sec. 4.5. *"Hydrographic area" means the drainage basin of a stream and its tributaries, together with any other stream or body of water to which that stream is tributary.*

Sec. 5. *"Project" and "improvement" each means any structure, facility, undertaking or system which a district is authorized to acquire, improve, equip, maintain or operate.*

Sec. 6. *"Taxpaying elector" means a person who is qualified to vote at general elections in this state, whether or not registered to vote or a resident in the district, and who, or whose spouse, is obligated as an owner or as a contract purchaser at a designated time or event to pay a general tax on real property within the district.*

Sec. 7. *A project may consist of any kinds of personal or real property or any estate, interest or right in property, singly or in any combination.*

Sec. 8. *When notice is required to be given by publication pursuant to NRS 543.160 to 543.830, inclusive, and sections 2 to 14, inclusive, of this act, publication must be made at least once a week for 3 consecutive weeks in at least one newspaper of general circulation in the district. It is not necessary that publication be made on the same day of the week in each of the 3 calendar weeks, but the first publication must be at least 15 days before the designated time or event.*

Sec. 9. *The board may enhance any project of the district by providing recreational facilities, landscaping and similar amenities in order to increase the usefulness of the project to the community, provide aesthetic compatibility with the surrounding community and mitigate the adverse effect of the project on the environment.*

Sec. 10. *Any improvement pursuant to NRS 543.160 to 543.830, inclusive, and sections 2 to 14, inclusive, of this act, may be located, constructed and maintained in, along or across any public road or highway in the district in a manner that affords security for life and property. The board shall restore or cause to be restored the road or highway to its former condition as nearly as may be, in order not to impair its usefulness.*

Secs. 11 through 13. (Deleted by amendment.)

Sec. 14. *1. The board shall adopt uniform regulations for the control of drainage, in accordance with the master plan, from land which is developed after the regulations become effective. The regulations may include provisions for the granting of a variance by the board upon application and showing of conditions peculiar to certain land which justify the variance.*

2. On and after July 1, 1987, a county or city is not eligible to receive money, from the regional fund for the control of floods, for the acquisition of a project or improvement unless it has incorporated these regulations in its ordinances governing the subdivision of land, parcel maps, and division of land into large parcels. The county or city is then responsible for their enforcement, but the county or any city may bring an action against any of the others to compel enforcement in the latter's territory.

3. The board may also require as a condition of granting money to a county or city that the recipient comply with uniform policies established by the board for the operation and maintenance of a project or improvement.

Sec. 14.5. NRS 543.170 is hereby amended to read as follows:

543.170 [1. It is hereby declared as a matter of legislative determination that the organization of districts having the purposes, powers, rights, privileges and immunities provided in NRS 543.160 to 543.830, inclusive, will serve a public use and will promote the health, safety, prosperity, security and general welfare of the inhabitants thereof and of the State of Nevada; that the acquisition, improvement, maintenance and operation of any project authorized in NRS 543.160 to 543.830, inclusive, is in the public interest and constitutes a part of the established and permanent policy of the State of Nevada; and that each district organized pursuant to the provisions of NRS 543.160 to 543.830, inclusive, shall be a body corporate and politic and a quasi-municipal corporation. For the accomplishment of these purposes the provisions of NRS 543.160 to 543.830, inclusive, shall be broadly construed.

2. It is hereby further declared as a matter of legislative determination that the notice provided for in NRS 543.160 to 543.830, inclusive, for each hearing and action to be taken is reasonably calculated to inform the parties of all proceedings which may directly and adversely affect their legally protected interest.

3. Nothing in NRS 543.160 to 543.830, inclusive, shall be construed to interfere with or conflict with or limit the functions and responsibilities of:

(a) The health division of the department of human resources as provided by law.

(b) The state engineer as provided by law, and in case of conflict between the provisions of NRS 543.160 to 543.830, inclusive, and such other law, the provisions of such other law shall prevail.]

The legislature finds and declares that:

1. Facilities to alleviate flooding in any district, whether located in a city, an unincorporated town or another unincorporated area of the county, benefit all the residents and owners of property in the district.

2. These facilities provide protection for life and property throughout the district, and usually require planning and development throughout a drainage basin.

Sec. 15. NRS 543.180 is hereby amended to read as follows:

543.180 As used in NRS 543.160 to 543.830, inclusive, [the following words or phrases are defined as follows:

1. "Acquisition," "acquire" and "acquiring" each means acquisition, extension, alteration, reconstruction, repair or other improvement by purchase, construction, installation, reconstruction, condemnation, lease, rent, gift, grant, bequest, devise, contract or other acquisition, or any combination thereof.

2. "Assessable property" means the tracts of land specially benefited by any project the cost of which is wholly or partly defrayed by the county by the levy of assessments, except:

(a) Any tract owned by the Federal Government, in the absence of its consent to the assessment, or the county.

(b) Any street or other public right of way.

3. "Board" means the board of directors of a district.

4. "District" means any flood control district organized or, in the case of organizational provisions, proposed to be organized, pursuant to NRS 543.160 to 543.830, inclusive.

5. "Mail" means a single mailing, first class (or its equivalent), postage prepaid, by deposit in the United States mails, at least 15 days prior to the designated time or event.

6. "Project" and "improvement" each means any structure, facility, undertaking or system which a district is authorized to acquire, improve, equip, maintain or operate. A project may consist of all kinds of personal and real property, including but not limited to land,

improvements and fixtures thereon, property of any nature appurtenant thereto or used in connection therewith, and every estate, interest and right therein, legal or equitable, including terms for years, or any combination thereof.

7. "Publication" means publication at least once a week for 3 consecutive weeks by three weekly insertions in at least one newspaper of general circulation in the district. It shall not be necessary that publication be made on the same day of the week in each of the 3 calendar weeks, but the first publication shall be at least 15 days prior to the designated time or event.

8. "Shall" is mandatory and "may" is permissive.

9. "Taxpaying elector" means a person who is qualified to vote at general elections in this state, and who, or whose spouse, is obligated as an owner or as a contract purchaser at a designated time or event to pay a general tax on real property within the district. Registration pursuant to the election (or any other) statutes is not required. Residence in the county is not required.] *and sections 2 to 14, inclusive, of this act, unless the context otherwise requires, the words and terms defined in sections 2 to 6, inclusive, of this act, have the meanings ascribed to them in those sections.*

Sec. 16. NRS 543.240 is hereby amended to read as follows:

543.240 [A] *1. In any county whose population is 250,000 or more, the entire county constitutes the district.*

2. In any other county, a district may:

[1.] *(a)* Consist of one contiguous area or of two or more noncontiguous areas.

[2.] *(b)* Include all or part of municipal corporations and other political subdivisions.

Sec. 16.5. NRS 543.250 is hereby amended to read as follows:

543.250 1. [The] *In any county whose population is less than 250,000 the* board of county commissioners [of any county is hereby vested with jurisdiction, power and authority to] *may* create districts.

2. No member of a board of county commissioners or board of directors [shall be] is disqualified to perform any duty imposed by NRS 543.160 to 543.830, inclusive, by reason of ownership of property within any proposed district.

3. A district so created may include territory within another *such* county, with the consent of the board of county commissioners of [such] *the* other county.

Sec. 17. NRS 543.320 is hereby amended to read as follows:

543.320 [A district shall be]

1. Except as otherwise provided in subsection 2, the district is governed by a board of directors consisting of the members of the board of county commissioners of the county.

2. If the district coincides with a county in which a regional transportation commission has been created pursuant to chapter 373 of NRS, *the members of that commission constitute the board of directors of the district.*

Sec. 18. NRS 543.330 is hereby amended to read as follows:

543.330 1. The board shall *meet in July of each year to organize and* choose one of its members as chairman of the board and president of the district, and [shall] elect a secretary of the board and of the district, who may or may not be a member of the board.

2. The county treasurer [shall be] *is* the treasurer of the board and of the district.

3. The secretary shall keep, in a well-bound book, a record of all of the board's proceedings, minutes of all meetings, certificates, contracts, bonds given by employees, and all corporate acts, which [book shall] *must* be open to inspection [of] *by* all owners of real property in the district as well as [to all] other interested persons.

4. The treasurer shall keep strict and accurate accounts of all money received by and disbursed for and on behalf of the district, in permanent records.

5. No member of the board [shall] *may* receive compensation for his services, but members [shall] *may* be reimbursed for their necessary expenses in attending district meetings and for necessary expenses incurred in traveling within and without the state when required to carry out the affairs of the district.

Sec. 19. NRS 543.340 is hereby amended to read as follows:

543.340 1. [The board shall meet regularly at least once each year, and] *In addition to the requirements of NRS 543.330, the board may meet* at such time or times and at such regular meeting place within the district as it [shall by resolution determine.] *determines by resolution.*

2. Special meetings may be held on notice to each member of the board as often as, and at such place or places within the district as, the needs of the district require.

3. A majority of the members of the board [shall constitute] *constitutes* a quorum at any meeting.

4. The board shall adopt written policies and procedures for administering the district and for operating and maintaining its projects and improvements.

Sec. 20. NRS 543.360 is hereby amended to read as follows:

543.360 The board may:

1. [Acquire,] *By the affirmative vote of two-thirds of its members, acquire,* construct, improve, extend, maintain and operate projects [, improvements and facilities] *and improvements* for the control of flood and storm waters of the district and the flood and storm waters of streams which have their sources outside of the district [, but which streams and the flood waters thereof] *but* flow into the district. *After July 1, 1986, no project or improvement may be acquired unless it is included in the master plan. A project or improvement must not be*

acquired unless it is first approved by an agreement among the county and all the cities all or part of whose territory is included in the hydrographic area which specifically identifies it, contains an estimate of its cost, and shows its relation to the master plan.

2. Conserve such waters for beneficial and useful purposes by spreading, storing, retaining and causing [such waters] *them* to percolate into the soil within or without the district.

3. Save and conserve in any manner all or any of such waters and protect from [such] floods or storm waters the watercourses, watersheds, public highways, life and property in the district.

4. Prevent waste of water or diminution of the water supply in, or the exportation of water from, the district.

5. Obtain, retain and reclaim drainage, storm, flood and other waters for beneficial use of the district.

Sec. 21. NRS 543.450 is hereby amended to read as follows:

543.450 The board [shall have the power:

1. To enter] *may:*

1. Enter upon any land to make surveys and locate the necessary [works of] improvements and the lines for channels, conduits, canals, pipelines, *basins for retention or detention of water,* roadways and other rights of way.

2. [To acquire,] *Acquire,* by purchase, lease, contract, condemnation or other legal means, all lands and water and water rights and other property necessary or convenient for the construction, use, supply, maintenance, repair and improvement of [such] *those* works, including works constructed or being constructed by private owners, lands for [reservoirs for storage of necessary] *basins for retention or detention of* water, and all necessary appurtenances.

3. [To enter] *Enter* into agreements with and do any acts necessary or proper for the performance of any agreements with the United States, or any state, county, district of any kind, public or private corporation, association, firm or [individual, or any number of them,] *other person* for the joint acquisition, construction, leasing, ownership, disposition, use, management, maintenance or repair or operation [to] *of* any rights, works or other property of any kind which might be lawfully acquired or owned by the district.

4. [To acquire] *Acquire* the right to [store water in any reservoir,] *retain or detain water in any basin,* or carry water through any canal, ditch or conduit not owned or controlled by the district.

5. [To grant] *Grant* to any owner or lessee the right to [the use of any water or the right to store such water in any reservoir of the district, or to carry such water through any tunnel, canal, ditch or conduit] *use any facility* of the district.

6. [To enter] *Enter* into and do any act necessary or proper for the performance of any agreement of the district of any kind with a [public or private corporation, association, firm or individual, or any number

of them,] *person, a governmental organization,* or the transfer or delivery [to any such district, corporation, association, firm or individual] of any water, water right or water supply stored, appropriated or otherwise acquired or stored for the use of the district, or for the purpose of exchanging [the same for] *it for any* other water, water rights or water supply [in exchange for water, water rights or water supply] to be delivered to the district . [by the other party to the district.]

7. Cooperate with and act in conjunction with the State of Nevada, or any of its engineers, officers, boards, commissions, departments or agencies, or with the United States Government or any of its engineers, officers, boards, commissions, departments or agencies, or with any public or private corporation [,] in the construction of any work for the controlling of [flood or storm waters] *floodwaters* of the district, or for the protection of life or property therein, or for the purpose of conserving [such] *those* waters for [the] beneficial use within the district, or for any other [works,] acts or [for] purposes provided for [herein,] *in this section* and to adopt and carry out any definite plan or system of work for [any such] *that* purpose.

Sec. 22. NRS 543.510 is hereby amended to read as follows:

543.510 1. The board [shall have the power:

(a) To appoint] *may:*

(a) Appoint a chief engineer and general manager who [shall] *must* be a civil engineer registered pursuant to the provisions of chapter 625 of NRS [.

(b) To hire and retain agents, employees, servants, engineers and attorneys, and any other persons necessary or desirable to effect the purposes of NRS 543.160 to 543.830, inclusive.

(c) To prescribe] *and must be selected from among three nominees proposed by a committee of private citizens. The county and each city all or part of whose territory is included in the district shall appoint one member to the committee.*

(b) Prescribe the duties of officers, agents, employees and servants, and fix their compensation.

(c) Create a technical committee for the district. If the board of county commissioners constitutes the board of directors, the technical committee must consist of one member and one alternate appointed by the county and by each city within the district. If the regional transportation commission constitutes the board of directors, the number of members and alternates appointed respectively by the county and by each city must be equal to the number of its representatives on the commission. The committee shall annually choose one of its members as chairman. The chief engineer and general manager has no vote in the committee but shall serve as its executive secretary.

2. [All county officers, including the] *The chief engineer and general manager may hire and retain agents, employees, servants, engineers and attorneys, and any other persons necessary or desirable to effect the purposes of the district.*

3. The district attorney, the county surveyor, [the county engineer,] the county assessor, the county auditor [and the county clerk,] *or comptroller, the county treasurer,* their deputies, assistants, clerks and other employees [, shall act as] *are* ex officio officers, deputies, assistants, clerks and employees of the district. They shall, [unless otherwise ordered] *if requested* by the board , [of county commissioners,] perform the same various duties for the district as for the county. *The board must reimburse the county for the cost of rendering these services.*

Sec. 23. NRS 543.550 is hereby amended to read as follows:

543.550 1. There is hereby granted to a district [created pursuant to the provisions of NRS 543.160 to 543.830, inclusive,] the right of way for the construction and maintenance of [flood control channels,] *floodways,* ditches, waterways, conduits, canals, [storm] dikes, embankments , *basins for retention or detention of water* and protective works [,] in, over and across public lands of the State of Nevada [,] not otherwise disposed of or in use, but not in any case exceeding the length or width necessary for the construction of [such] *those* works and adjuncts or for the protection thereof.

2. Whenever any selection of right of way for [such] *those* works or adjuncts [thereto] is made by the district, the board shall transmit to the division of state lands of the state department of conservation and natural resources *and any other agency or entity of the state owning land in the area, including the University of Nevada and the Colorado River Commission,* and to the county recorder of the county in which the selected lands are situated a plat of the lands so selected, giving the extent thereof and the uses for which [the same] *they* are claimed or desired, verified to be correct.

3. If the division of state lands of the state department of conservation and natural resources [shall approve] *approves* the selection so made, [approval shall] *it must* be endorsed upon the plat and [there shall be issued to the district a permit to use such] *a permit must be issued to use the* rights of way and land.

Sec. 23.5. NRS 543.580 is hereby amended to read as follows:

543.580 1. The chief engineer and general manager [shall have the authority, with the approval of the state department of conservation and natural resources, to] *may* investigate carefully the best plan or plans:

(a) To control the [flood and storm waters] *floodwaters* of the district and the [flood and storm waters] *floodwaters* of streams that have their sources outside of the district [, but which stream and flood waters thereof] *but* flow into the district; [and]

(b) To conserve such waters for beneficial and useful purposes by spreading, storing, retaining, or causing to percolate into the soil within or without the district, or to save or conserve in any manner, any or all of such waters; and

(c) To protect the watercourses, watersheds, public highways, life and property in the district from damage from such water,

and to obtain such other information in regard thereto as may be deemed necessary or useful in carrying out the purposes of NRS 543.160 to 543.830, inclusive.

2. The chief engineer and general manager shall make and file reports from time to time with the board, which [reports shall] *must* show:

(a) A general description of the work to be done on each project or work of [improvements.] *improvement.*

(b) General plans, profiles, cross sections and other general specifications of the work to be done on each project or work of improvement.

(c) A general description of the lands, rights of way, easements and property proposed to be taken, acquired or injured in the carrying out of [such] *that* work.

(d) An estimate of the cost of each project or [works of improvements] *work of improvement* including:

(1) An estimate of the costs of lands, rights of way, easements and property proposed to be taken, acquired or injured in carrying out [such] *the* project or work of improvement.

(2) An estimate of all incidental expenses likely to be incurred in connection therewith, including legal, clerical, engineering, superintendence, inspection, printing and advertising, and stating the total amount of bonds, if any, necessary to be issued to pay for [the same.] *it.*

(3) A comparison of the total cost of the proposed works with an estimate of the cost of condemnation and relocation or replacement of property within the boundaries of the flood plain.

3. The chief engineer and general manager shall, from time to time, as directed by the board, file with the board supplementary, amendatory and additional reports and recommendations as necessity and convenience may require.

4. The chief engineer and general manager may, subject to the control and direction of the board, employ [such] other engineers, surveyors and other persons required for making all surveys and doing any work necessary for the making of the reports.

Sec. 24. NRS 543.590 is hereby amended to read as follows:

543.590 1. After a district has been established, the board shall cause its chief engineer or qualified private engineers or consultants to make a survey of the [flood control problems of] *problems of controlling floods in* the district and to prepare a report setting forth:

(a) A description of existing [flood control] facilities *for the control of floods* in the area.

(b) Recommendations as to cooperation between the district and the owner or owners of [such existing] *the* facilities.

(c) Recommendations for the construction or other acquisition of facilities to carry out the purpose of the district, with a preliminary plan therefor.

(d) A description of the property proposed to be acquired or damaged in the performance of work.

(e) A map showing the [district] boundaries *of the district* and location of the work proposed to be done.

(f) *A map showing the hydrographic areas to be used by the district for planning and acquisition of projects and improvements.*

(g) Such other facts and information as the board may request.

2. [Before submission to the board, the report shall be submitted to the health division of the department of human resources for review of any portions concerning water pollution and shall then be submitted to the state department of conservation and natural resources for revision and comment and returned to the board.] In the preparation of the report, the director of the state department of conservation and natural resources and the health division may assist in preliminary planning by:

(a) The assignment of [state] technical, professional and administrative personnel.

(b) Providing *information for* engineering and other planning . [data.]

(c) Acting as [coordinating and liaison agents] *coordinator and liaison* between the district and participating local, state and federal agencies.

[Funds] *Money* expended in preliminary planning may, upon application to the director of the state department of conservation and natural resources and to the health division, be refunded, if [funds] *money* for these purposes [have] *has* been appropriated by the legislature.

3. The chief engineer for the district shall then prepare *for each hydrographic area* a [comprehensive program of flood control,] *master plan for the control of floods which must set forth the most effective structural and regulatory means for correcting existing problems of flooding within the area and dealing with the probable effects of future development,* taking into consideration the recommendations submitted in the report. *In preparing the master plan, he shall incorporate insofar as possible the planning completed or undertaken by the county, each city all or part of whose territory is included in the area, and any private engineer or developer for any part of the area. The master plan may include as separate elements the immediate needs, indicating their relative priority, and other future needs.*

4. When a [comprehensive program,] *master plan* satisfactory to the board, and after review by the director of the state department of conservation and natural resources , is available, it [shall] *must* be tentatively adopted. A public hearing on the proposed work [shall] *must* be scheduled and notice of the hearing [shall be] given by publication. After hearing and any adjournments thereof which may be ordered, the board may either require changes to be made in the [program] *master plan* as the board [shall consider] *considers* desirable or the board may approve the [program] *tentative master plan* as prepared. If changes are ordered a further hearing [shall] *must* be held pursuant to notice [which shall be] given by publication.

5. The county and each city all or part of whose territory is included within each hydrographic area shall then hold a public hearing to consider adopting the tentative master plan as a component of its master plan pursuant to chapter 278 of NRS. The master plan or its parts for that hydrographic area do not become final until adopted by the county and each city.

Sec. 24.3. NRS 543.600 is hereby amended to read as follows:

543.600 [The board shall have power and authority to levy and collect general (ad valorem) taxes on and against all taxable property within the district, such levy and collection to be made by the board in conjunction with the county and its officers as set forth in NRS 543.160 to 543.830, inclusive.] *1. In a county whose population is 250,000 or more, the board of county commissioners shall hold public hearings before deciding which one or combination of the powers set forth in this section is to be used to provide revenue for the support of the district. The method selected must be approved, in an election held throughout the district, by a majority of the voters voting on the question.*

2. The board of county commissioners may levy and collect taxes ad valorem upon all taxable property in the county. This levy is not subject to the limitations imposed by NRS 354.59805 to 354.5987, inclusive. A district for which a tax is levied pursuant to this subsection is not entitled to receive any distribution of supplemental city-county relief tax.

3. The board of county commissioners may impose a tax of not more than 0.25 percent on retail sales and the storage, use or other consumption of tangible personal property in the county. The ordinance imposing this tax must conform, except as to amount, to the requirements of chapter 377 of NRS and the tax must be paid as provided in that chapter.

4. In any other county, the board of county commissioners may only levy taxes ad valorem upon all taxable property in the district.

5. In any county, the board of directors may use any other money, including federal revenue sharing, that is made available to the district.

Sec. 24.6. NRS 543.650 is hereby amended to read as follows:

543.650 *1. The proceeds of all taxes and charges levied or imposed for the support of the district and all other revenues received for its account from any source must be deposited in the regional fund* *for the control of floods. No money may be drawn from the fund except for the use of the district.*

2. Whenever any indebtedness has been incurred by a district, [it shall be lawful for the board to] *the board may also* levy taxes and collect revenue for the purpose of creating a reserve fund in such amount as the board may determine, which may be used to meet the obligations of the district, for maintenance and operating charges and depreciation, and *to* provide extension of and betterments to the improvements of the district.

Sec. 25. NRS 543.675 is hereby amended to read as follows:

543.675 1. [A fee] *In a county whose population is less than 250,000 an* owner *in fee* of real property situate in the district [, or the fee owners of any real properties which are contiguous to each other and which constitute a portion of the district,] may file with the board a petition praying that [such] *those* lands be excluded [and taken] from the district.

2. Petitions [shall:] *must:*

(a) Describe the property which the [petitioners desire] *petitioner desires* to have excluded.

(b) State that the property [is not] *does not produce any runoff of floodwater* capable of being served [with] *by the* facilities of the district [, or would not be benefited by remaining in the district or by any future improvement it might make.] *or by any future improvement contained in the master plan.*

(c) Be acknowledged in the same manner and form as required in case of a conveyance of land.

(d) Be accompanied by a deposit of money sufficient to pay all costs of the [exclusion proceedings.] *proceedings for exclusion.*

3. The secretary of the board shall cause a notice of filing of such petition to be published, which [notice shall:] *must:*

(a) State the filing of [such] *the* petition.

(b) State the names of the petitioners.

(c) Describe the property mentioned in the petition.

(d) State the prayer of the petitioners.

(e) Notify all persons interested to appear at the office of the board at the time named in the notice, [showing cause in writing, if any they have,] *and show cause in writing* why the petition should not be granted.

4. The board at the time and place mentioned in the notice, or at the times to which the hearing of the petition may be adjourned, shall proceed to hear the petition and all objections thereto, presented in writing by any person . [showing cause why the prayer of the petition should not be granted.]

5. The filing of [such petition shall be deemed and taken as] *the petition is* an assent by each [and all such petitioners] *petitioner* to the

exclusion from the district of *all or part of* the property mentioned in the petition . [, or any part thereof.]

6. The board, [if it deems it not for the best interest of the district that the property mentioned in the petition, or portion thereof,] *if it considers it not to be in the best interest of the district that all or part of the property* be excluded from the district, shall order that the petition be denied in whole or in part, as the case may be.

7. If the board [deems it for] *considers it to be in* the best interest of the district that the property mentioned in the petition [or some portion thereof] be excluded from the district, the board shall order that the petition be granted in whole or in part, as the case may be.

8. There [shall] *may* be no withdrawal from a petition after consideration by the board nor [shall] *may* further objection be filed except in case of fraud or misrepresentation.

9. Upon [allowance of such] *granting the* petition, the board shall file for record a certified copy of its ordinance making [such] *the* change, [as] *in the manner* provided in NRS 543.300.

Sec. 26. NRS 543.685 is hereby amended to read as follows:

543.685 [The] *In a county whose population is less than 250,000 the* boundaries of a district may be enlarged by the inclusion of additional real property [therein] in the following manner:

1. The [fee owner or owners] *owner in fee* of any real property capable of being served [with] *by the* facilities of the district may file with the board a petition [in writing praying that such] *praying that the* property be included in the district.

2. The petition [shall:] *must:*

(a) Set forth an accurate legal description of the property . [owned by the petitioners.]

(b) State that assent to the inclusion of [such] *the* property in the district is given by [the signers thereto, constituting] all the [fee] owners *in fee* of [such] *the* property.

(c) Be acknowledged in the same manner required for a conveyance of land.

3. There [shall] *may* be no withdrawal from a petition after consideration by the board nor [shall] *may* further objections be filed except in case of fraud or misrepresentation.

4. The board shall hear the petition at an open meeting after publishing the notice of the filing of [such] *the* petition, and of the place, time and date of [such] *the* meeting, and the names and addresses of the petitioners. The board shall grant or deny the petition and the action of the board [shall be] *is* final and conclusive. If the petition is granted as to all or any of the real property [therein] described, the board shall make an order to that effect, and file [the same] *it* for record [as] *in the manner* provided in NRS 543.300.

5. After the date of its inclusion in [such district, such property shall be] *the district, the property is* subject to all of the taxes imposed

by the district, and [shall be] *is* liable for its proportionate share of *the* existing general obligation bonded indebtedness of the district . [; but it shall not be] *It is not* liable for any taxes levied or assessed [prior to] *before* its inclusion in the district.

Sec. 27. NRS 543.720 is hereby amended to read as follows:

543.720 1. Whenever [any] *the* board determines, by resolution, that the interest of the district and the public interest or necessity demand the acquisition, construction, installation or completion of any works or other improvements or facilities, or the making of any contract with the United States or other persons or corporations, to carry out the objects or purposes of the district, requiring the creation of an indebtedness of [$1,000] *$50,000* or more, the board shall order the submission of the proposition of issuing [such] *the* obligations or bonds or creating other indebtedness to the qualified taxpaying electors of the district at an election held for that purpose.

2. [Any such] *The* election may be held separately, or may be consolidated or held concurrently with any primary or general election.

3. The declaration of public interest or necessity required by this section and the provision for the holding of [such] *the* election may be included within [one and] the same resolution, which [resolution, in addition to such declaration of public interest or necessity, shall:] *must:*

(a) Recite the objects and purposes for which the indebtedness is proposed to be incurred, the estimated cost of the works or improvements, [as the case may be,] the amount of principal of the indebtedness to be incurred , [therefor,] and the maximum rate of interest to be paid on [such] *the* indebtedness.

(b) Fix the date upon which [such election shall be held and] *the election will be held,* the manner of holding the [same] *election* and the method of voting for or against the incurring of the proposed indebtedness.

(c) Fix the compensation to be paid the officers of the election , [and shall] designate the polling place or places and [shall appoint, for each polling place from the electors of the district, three officers of such election,] *appoint, from the taxpaying electors of the district, three officers of the election for each polling place,* one of whom shall act as clerk.

Sec. 28. NRS 543.790 is hereby amended to read as follows:

543.790 Whenever a majority of the members of the board [of county commissioners of any such county deem] *considers* it to be in the best interests of the [county and of the district that any such district] *district and the area served by the district that the district* be dissolved, it shall so determine by [ordinance,] *resolution,* after there is first found and determined and recited in [such ordinance] *the resolution* that all outstanding indebtedness and bonds of all kinds of the district have been paid. The [county clerk shall thereupon certify a copy of the ordinance to the board of such district and] *secretary of the board* shall give notice by publication of:

1. The adoption of [such ordinance;] *the resolution;*
2. The determination of the board [of county commissioners] that the district should be dissolved; and
3. The time and place for hearing *preliminary to the adoption of an ordinance* on dissolution.

Sec. 28.5. NRS 377.057 is hereby amended to read as follows:

377.057 1. The state controller, acting upon the relevant information furnished by the department, shall monthly from the fees, taxes, interest and penalties which derive from the supplemental city-county relief tax collected in all counties and from out-of-state businesses during the preceding month, after making any distributions required by NRS 377.053:

(a) Distribute the amount specified in this paragraph among the following local governments in the following percentages:

Political Subdivision	Percentage
Churchill County	3.23
City of North Las Vegas	46.52
City of Carlin	2.72
Esmeralda County	.20
Eureka County	.71
City of Winnemucca	5.56
City of Caliente	.46
City of Yerington	4.77
Mineral County	9.96
City of Gabbs	4.31
Pershing County	2.52
City of Lovelock	5.77
White Pine County	5.37
City of Ely	7.90

For the fiscal year beginning July 1, 1981, the monthly amount is $71,110. For each succeeding fiscal year, this amount must be reduced by $7,111 from the preceding year.

(b) Distribute to each local government the amount calculated for it by the department of taxation pursuant to subsection 2.

2. The maximum amounts distributable under paragraph (b) of subsection 1 must be estimated for each fiscal year. The percentage of maximum allowable revenue, as determined pursuant to NRS 354.59805, to be derived from the supplemental city-county relief tax must be as nearly equal among the several counties as possible. The amount apportioned to each county must then be apportioned among the several local governments therein, including the county and excluding the school district , [and] any redevelopment agency, *and any other*

local government excluded by specific statute, in the proportion which each local government's basic ad valorem revenue bears to the total basic ad valorem revenue of all these local governments except that no local government may receive more than the amount to which it is entitled pursuant to NRS 354.59811 and 354.59816. When any local government has received the maximum supplemental city-county relief tax calculated to be distributed to it, any remaining money otherwise distributable to it must be deposited in the reserve fund for the supplemental city-county relief tax.

3. As used in this section, the "basic ad valorem revenue":

(a) Of each local government is its assessed valuation for the year of distribution, multiplied by the rate levied on its behalf for the fiscal year ending June 30, 1981, for purposes other than paying the interest on and principal of its general obligations. For the purposes of this paragraph:

(1) A county whose actual tax rate, for purposes other than debt service, for the fiscal year ending on June 30, 1981, was less than 50 cents per $100 of assessed valuation is entitled to the use of a rate not greater than 80 cents per $100 of assessed valuation.

(2) A fire district in such a county whose tax rate was more than 50 cents per $100 of assessed valuation is entitled to the use of a rate not greater than $1.10 per $100 of assessed valuation.

(b) Of the county for the distribution under subsection 1 is the sum of its individual basic ad valorem revenue and those of the other local governments within it, excluding the school district.

4. For the purposes of this section, a fire district organized pursuant to chapter 473 of NRS is a local government.

Sec. 29. NRS 543.350 and 543.671 are hereby repealed.

Sec. 30. 1. In Clark County the board of county commissioners and the governing body of each city shall appoint its representatives to the committee for nomination of a chief engineer and general manager of the Clark County Regional Flood Control District within 60 days after the effective date of this act.

2. The board of directors shall estimate the amount of money needed to support the district during the fiscal years beginning on and after July 1, 1987, by August 1, 1986. The board of county commissioners shall hold its hearings, decide upon the source of revenue for that support, and submit the chosen method of financing for the required approval at the primary election in 1986.

3. The tax or charge first imposed as the result of this selection must be made effective on July 1, 1987. For the fiscal year 1985-1986 there is hereby levied a tax ad valorem of 2 cents on each $100 of assessed valuation on all taxable property in the county for the support of the district.

Sec. 31. There is hereby created a committee of members of the legislature to oversee the effectuation of this act in Clark County. The legislative commission shall appoint to the committee a suitable number of the legislators elected from that county. The members of the committee shall lend their good offices to promote cooperation among the local governments involved, and shall report their observations to the 64th session of the legislature. The board of directors of the district comprising Clark County shall meet with the committee at least three times: on or before January 1, 1986, July 1, 1986, and January 1, 1987.

Sec. 32. 1. This act becomes effective upon passage and approval.

2. Section 31 of this act expires by limitation except for the required report, upon the adoption of the master plan in Clark County.

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[illegible]

SUMMARY RESULTS

PRELIMINARY PUBLIC OPINION SURVEY CLARK COUNTY FLOOD CONTROL NEEDS

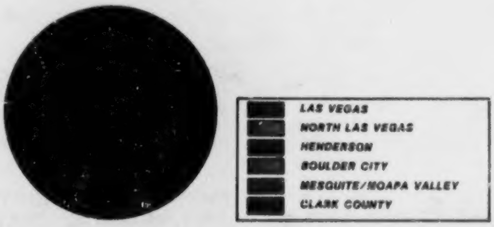
AUGUST 1985

JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

A preliminary public opinion survey concerning Clark County Flood Control Needs was conducted to assess three key issues:

- To determine the percentage of voters directly impacted by flooding;
- To determine the average voter's perception of local flood problems and possible solutions;
- To determine the funding method voters would be most willing to support for an ongoing flood control program.

GEOGRAPHIC LOCATION OF RESPONDENTS

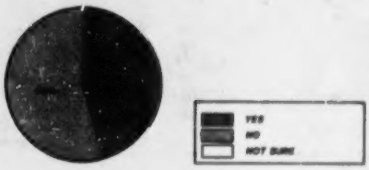


This survey does not attempt to determine if a funding method would be approved by the voters now or in the future. Some pertinent results of the survey are summaried below:

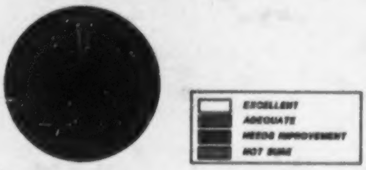
1. An overwhelming majority of 95% responded that flood control measures in Southern Nevada NEED IMPROVEMENT.
2. 46% of the respondents felt they were DIRECTLY impacted by flooding.
3. 89% of those surveyed BELIEVE WE NEED TO PLAN AND BUILD A MASTER FLOOD CONTROL SYSTEM TO PROTECT OUR VALLEY.
4. A majority of 59% would be more willing to vote for a 1/4¢ SALES TAX.
5. 22% of the respondents would vote for a PROPERTY TAX of approximately $45 per year on a $100,000 home.
6. 6% would vote for NEITHER TAX.
7. 14% were UNDECIDED.

SUMMARY RESULTS OF SEVEN SURVEY QUESTIONS

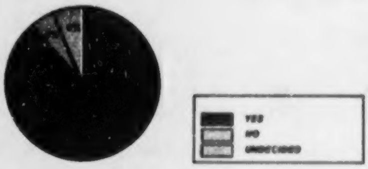
DO YOU VIEW FLOODING IN THE LAS VEGAS VALLEY AS A PROBLEM FOR YOUR HOME, FAMILY, OR BUSINESS?



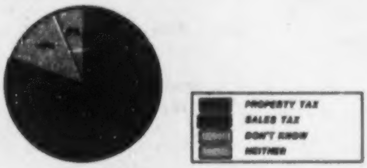
DO YOU THINK THE OVERALL FLOOD CONTROL MEASURES IN SOUTHERN NEVADA ARE:



DO YOU BELIEVE WE NEED TO PLAN AND BUILD A MASTER FLOOD CONTROL SYSTEM TO PROTECT OUR VALLEY?

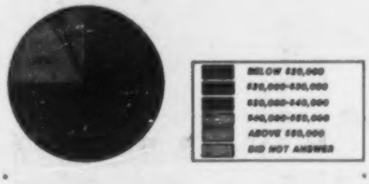


WHICH FUNDING METHOD WOULD YOU BE MOST WILLING TO VOTE FOR?

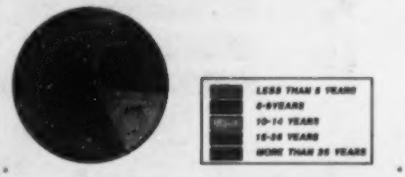


PLEASE INDICATE IF YOUR AGE IS BETWEEN:

IS YOUR YEARLY INCOME CLOSEST TO:



HOW LONG HAVE YOU LIVED IN CLARK COUNTY?



TECHNICAL AND SUPPORT DATA CONCERNING PUBLIC OPINION SURVEY

The flood control public opinion survey was conducted on Tuesday, August 20, 1985 through Saturday, August 24, 1985, during the hours of 9:00 AM to 9:00 PM. A scientifically determined random sample of registered voters was selected by Passkey Systems. Telephone interviews for the survey were conducted by trained research staff. Several key facts about those who responded to the survey are listed below:

1. The sample interview represents **64%** Democrats; **31%** Republicans; and **4%** Other.

2. Homeowner's represent **82%** of those surveyed; apartment dwellers **10%**; and Mobile Homeowners **8%**.

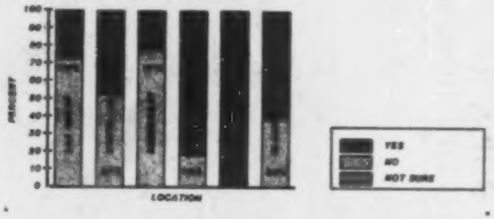
3. Gender and age statistical inferences are: Male voters **45%**; Female voters **55%**; Voters 18-29 years **10%**; 30-44 years **25%**; 45-60 years **34%**; and above 60 years **31%**.

4. Respondents annual household income statistics are: Below $20,000, **19%**; $20,000 - $30,000 **37%**; $30,000 - $40,000 **24%**; $40,000 - $50,000 **18%**; and above $50,000 **2%**.

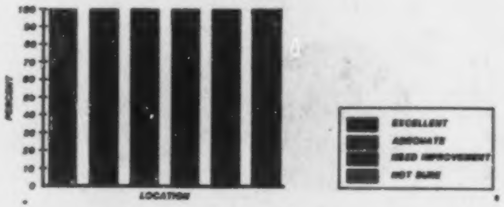
5. Breakdown of residency in Clark County is: Below 5 years **7%**; 5-9 years **19%**; 10-14 years **15%**; 15-25 years **31%**; and over 25 years **28%**.

ANALYSIS OF SURVEY RESULTS ACCORDING TO RESPONDENT LOCATION

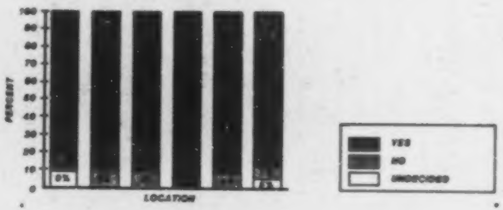
DO YOU VIEW FLOODING IN THE LAS VEGAS VALLEY AS A PROBLEM FOR YOUR HOME, FAMILY, OR BUSINESS?



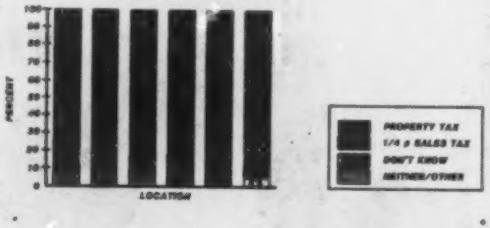
DO YOU THINK THE OVERALL FLOOD CONTROL MEASURES IN SOUTHERN NEVADA ARE:



DO YOU BELIEVE WE NEED TO PLAN AND BUILD A MASTER FLOOD CONTROL SYSTEM TO PROTECT OUR VALLEY?



WHICH FUNDING METHOD WOULD YOU BE MOST WILLING TO VOTE FOR?



Mr. **Bevill**. We are always glad to have you with us. Thank you both. If there are no questions, we will certainly be taking this under advisement, and will do what we can.

Mr. **Woodbury**. We appreciate it.

Wednesday, April 16, 1986.

NEBRASKA WATER PROJECTS

WITNESS

HON. VIRGINIA SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA

Mr. **Bevill**. Next, I am going to recognize our good friend and colleague, Mrs. Smith, who does an outstanding job on this subcommittee, and ask her to take care of the next three witnesses.

Mrs. **Smith**. Thank you very much, Mr. Chairman.

It is my privilege to have before our subcommittee the local sponsors of key Nebraska water projects funded by the subcommittee.

These are all long-time friends, most of whom have been here many times before. They continue to give of their time, talent and expense to travel more than 2,000 miles to update the subcommittee on their projects, to continue to build the legislative record, and to express their appreciation for the support enjoyed these many years.

Their ranks are decimated this year, however, by one of the severest spring snowstorms in history. Notably absent are the local sponsors of the O'Neill Unit, a project dreamed of by Alfred Drayton, President of the Northcentral Nebraska Reclamation District, and his associates for many decades and supported by our subcommittee since the early 1950s.

In Mr. Drayton's stead, we have Dayle Williamson, Director, Nebraska Natural Resources Commission, and official representative of our Governor, who will testify also with respect to other Nebraska water projects.

Also offering written testimony to the committee are local sponsors of the Prairie Bend Project, whose feasibility study is beginning to reach its later stages and whose funding is part of the President's budget.

This study is scheduled to be completed next year. These local sponsors were urged by me to keep their powder dry until next year, when the study is complete, and they and the Bureau of Reclamation are ready with a preferred plan.

We have written testimony, too, from the sponsors of the prospective South Platte-Frenchman River reconnaissance level study.

Additionally, I am submitting the written testimony on behalf of a proposed Northern Great Plains Solute Movement Laboratory by the University of Nebraska-Lincoln, prepared by Dr. William L. Powers, Director, Water Resources Center, of the University.

Now, those are the people who are not here for various reasons. Let me introduce to you again those who did make it out of the snow drifts and into the lovely spring of Washington, D.C.

First, my good friend and colleague, Congressman Hal Daub of the Second Congressional District, with Mr. James H. Suttle, Omaha's Director of Public Works; Omaha City Councilman Bernie Simon; Washington County Representative Mel Hoier, and Sarpy County Representative Milton Fricke. They will talk about the Papillion Creek Flood Control Project.

[The information follows:]

TESTIMONY

BY

CENTRAL PLATTE NATURAL RESOURCES DISTRICT

GRAND ISLAND, NEBRASKA

TO:

UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HOUSE COMMITTEE ON APPROPRIATIONS

THE HONORABLE TOM BEVILL, CHAIRMAN

REQUEST: $401,000.00 for Fiscal 1987

FUNDING PURPOSE: Completion of Feasibility Study by U.S. Bureau of Reclamation

PROJECT: Prairie Bend Unit

LOCATION: Dawson, Buffalo and Hall Counties in Nebraska

PROJECT PURPOSE: Irrigation, stabilization of ground water levels, enhancement of water quality, small community and rural domestic water supplies, fish and wildlife habitat, flood control, public outdoor recreation and other purposes determined to be appropriate.

Mr. Chairman....Committee Members:

My name is Ron Bishop and I am General Manager for the Central Platte Natural Resources District. Our Central Platte Natural Resources District covers part or all of the ten counties in south central Nebraska that encompass the Platte River and its drainage areas along a 175 mile stretch extending from Gothenburg, Nebraska on the west to Columbus, Nebraska on the east.

A number of serious problems and critical needs relating to water exist within our Natural Resources District area. The economy of the area and the well-being of the people residing therein is dependent upon irrigated agriculture with the primary source of irrigation water being ground water.

The ground water levels, however, have been declining, causing an increase in pumping costs and an accompanying reduction in well production. The current ground water level declines of up to 25 feet are predicted to increase over the next 20 to 35 years to the point where thousands of irrigated acres will revert to dry-land without some kind of a supplemental supply project.

Additionally, each and every one of the over one hundred thousand residents within our Natural Resources District gets their drinking water supply from ground water but ground water quality problems have developed in the eastern half of our District to the point where a number of municipalities have had to abandon wells because the nitrate levels exceeded the U.S. Public Health Service's published maximum safe level for human consumption.

The area is also subject to infrequent but severe flooding. The single flood event of June 1967 caused over $30,000,000.00 worth of damage in the eastern half of our Natural Resources District alone.

In addition to those three major problems there are also some needs related to water within our area.

First of all, there is a need to maintain adequate water supplies for the waterfowl, fish and wildlife that currently utilize the area. The Big Bend area of the Platte River Basin in Nebraska plays host to five to seven million migratory waterfowl each and every year.

There is also a need within our area for water based recreation facilities for our residents and the other residents of central Nebraska.

Senator James Exon, Senator Edward Zorinsky, Congresswoman Virginia Smith and our Natural Resources District along with several other organizations, groups, associations and individuals have been working for a number of years toward getting a water resources project implemented in the area that would resolve those problems and address those needs.

The project that is needed and envisioned by the study sponsors, which are our Natural Resources District, the Central Nebraska Conservation Association and the Twin Valley Conservation

Association, is not a single purpose irrigation project but a comprehensive multi-purpose water resources project.

We have good reason to believe that one project could:

(1) supply supplemental irrigation water
(2) stabilize the declining ground water levels
(3) enhance ground water quality
(4) protect and enhance the quality of the municipal, small communities and rural domestic water supplies
(5) provide fish and wildlife habitat
(6) provide flood control and reduce flood damage, and
(7) provide public outdoor recreation for the residents of south-central Nebraska.

In addition, we feel the project can be designed so that it recognizes and addresses the need for maintaining flows in the Platte River at the critical times for such instream and downstream uses as:

(1) ground water recharge for irrigation and rural domestic supplies
(2) induced recharge for municipal water supplies
(3) migratory waterfowl
(4) maintenance of sub-irrigated crops
(5) maintenance of wet meadows and wetlands
(6) water quality enhancement in surface and ground water, and
(7) fish and wildlife.

We have already made a considerable amount of up-front progress toward making the project a reality. Numerous studies, programs and data gathering efforts have been conducted that will aid in the preparation of the feasibility study.

(1) Water Quality Studies. The water quality studies and programs that have already been conducted will be beneficial to the planning of the water resources project as it relates to identification of water quality problem area, extent of the problem and effective methods of improving the ground water quality.

The local people, through our Central Platte Natural Resources District, have provided over $400,000.00 in cash toward those studies to date, in addition to the hundreds of man hours involved.

The funding by the State of Nebraska toward those studies has been approximately equal to the local contribution.

(2) Ground Water Model. Our Central Platte Natural Resources District and the Lower Loup Natural Resources District, which borders us on the north, under contract with the U.S. Geological Survey, has developed a detailed ground water flow model of the ground water basin lying between the Loups and Platte River from the Lincoln-Dawson County line eastward, which encompasses the proposed project area.

The approximate cost of this ground water flow model and its subsequent operation is $250,000.00 with assistance through the U.S. Geological Survey on the original development costs.

The ground water model is now available as a planning tool in evaluating the various alternatives available for the water resources project.

(3) Study of Engineering Alternatives. Our Natural Resources District contracted with the Denver, Colorado office of the engineering firm of CH2M Hill to look at various project alternatives available to the local people. One set of alternatives the firm evaluated was the physical or engineering alternatives available to address the water supply needs of the project area.

(4) Study of Financial Options. Another set of alternatives evaluated by CH2M Hill firm were the options available to the local people for financing or assisting in the financing of the water resources program.

(5) Study of Institutional Options. The third set of alternatives evaluated by CH2M Hill for the District were the options available to the local people for establishing an organization to develop, manage and operate a water resources program.

The studies by the private firm of the engineering alternatives along with the study of the financial and institutional options was done under contract to, and paid for by, the Natural Resources District at a cost of approximately $35,000.00.

(6) Hydrologic and Water Resources Investigation. The engineering firm of Henningson, Durham and Richardson from Omaha, Nebraska conducted an investigation of the water availability in the Platte River and the preliminary water needs of the proposed project area. The investigation and studies by Henningson, Durham and Richardson were done under contract to, and paid for by, local interests at a cost of approximately $23,000.00.

(7) U.S. Bureau of Reclamation's Appraisal Study. The Bureau made an evaluation of a supplemental water supply project for the eastern part of the proposed project area during their Upper Platte Basin Study.

The water budget studies indicate that ultimately some 35 to 40 percent of the arable land may be without a reliable water supply for irrigation purposes without a project.

Additional problems resulting in the predicted water table decline would include increased degradation of ground water quality and loss of wet meadow areas north of and adjacent to the Platte River.

(8) Central Platte Natural Resources District's Groundwater Management Plan. The Natural Resources District, in an effort to maximize the conservation and protection of our ground water supplies, has recently completed a ground water management plan that will complement the Prairie Bend Unit project. That ground water management plan has received the approval of the State of Nebraska and is scheduled to be implemented over the next 18 months.

All of the data from these plans, studies, programs, research and activities lead us to several conclusions:

(1) The water resources project is feasible from both an engineering and an economic viewpoint;

(2) There is sufficient unused flows in the Platte River that passes right through our Natural Resources District to provide the supplemental water needed;

(3) There is sufficient water available to recharge the ground water aquifer and stabilize the now declining ground water levels;

(4) That ground water recharge can also enhance ground water quality and protect the municipal, small community and rural domestic water supplies;

(5) There are good reservoir sites for the necessary storage available on Prairie Creek and on Wood River and its tributaries;

(6) Soils within the project area are highly suitable for irrigation with most of the land falling in the Soil Conservation Service's classification of "prime" agricultural land;

(7) Benefits from the project would more than cover the costs of building and operating the project;

(8) Large monetary, environmental and aesthetic benefits would occur from the development of fishing, wildlife and recreational aspects of the water and land use;

(9) Major flood control benefits could occur at little or no additional cost;

(10) Analyzing the project from an irrigation standpoint alone should have a favorable benefit:cost ratio of approximately 1.6 to 1;

(11) The Bureau of Reclamation indicated from their studies that a feasibility study of the project appears to be justified, both on the basis of need and on the basis of probable economic feasibility.

In summary, while we have major problems, there is a feasible solution. Feasible both from an engineering and an economic standpoint. The solution is a multi-purpose water resources project.

Our Natural Resources District Board, many other organizations from the area and people from our region are in support of, and committed to, this project.

We have the support of the State of Nebraska and we now have the necessary legislation. The U.S. Bureau of Reclamation was authorized and funded to initiate the necessary feasibility studies in mid 1983 and began the investigations in the fall of 1983.

We are confident that a multi-purpose water resources project will prove to be feasible and, when developed, will make a major contribution to the stability of Central Nebraska's economy and to the people of the region and their well being, as well as enhance the fish and wildlife resources. We have contracted with the Bureau of Reclamation and are cost-sharing $240,000.00 of the feasibility study's cost plus considerable additional in-kind services.

To make such a program a reality we need your continued help and we need the continued help of the U.S. Bureau of Reclamation.

We would hope that you would all lend your strong individual and committee support to the Federal appropriation of at least $401,000.00 for Fiscal 1987 so that the Bureau of Reclamation can complete the feasibility study that we so earnestly need.

Thank you.

TESTIMONY
BY
RODNEY K. GANGWISH
SHELTON, NEBRASKA
TO:

UNITED STATES HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS
THE HONORABLE TOM BEVILL, CHAIRMAN

REQUEST:	$401,000.00 for Fiscal 1987
FUNDING PURPOSE:	Completion of Feasibility Study by U.S. Bureau of Reclamation
PROJECT:	Prairie Bend Unit
LOCATION:	Dawson, Buffalo and Hall Counties in Nebraska
PROJECT PURPOSE:	Irrigation, stabilization of ground water levels, enhancement of water quality, small community and rural domestic water supplies, fish and wildlife habitat, flood control, public outdoor recreation and other purposes determined to be appropriate.

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Bevill:

I would like to take this opportunity to submit written testimony in support of continuing the feasibility study for the Prairie Bend Unit by the Bureau of Reclamation.

I am a landowner and live two and a quarter miles south, and two and a quarter miles west of Shelton, Nebraska, within the boundaries of the proposed Prairie Bend Unit and am actively engaged in a farming partnership with my brother and my father.

I wish to convey to you a growing concern on the part of myself and my neighbors about the future of irrigated agriculture in our area.

We have ground water declines of 15 to 25 feet in the area with a significant decrease in well production. In most areas of the northern part of the Prairie Bend Unit, the top water Pleistocene formation has been depleted. Some of these shallow wells in the northern reaches of the area that were yielding 700 to 800 gallons per minute 10 years ago and now yield less than 150 gallons per minute. These shallow wells have been replaced with deep wells drilled into the Ogallala aquifer. The problem is that in some areas the Ogallala formation either does not exist or is not that productive and is yielding only 400 gallons per minute.

The land we farm that lies close to the Platte River (within two to four miles) also has no deep water Ogallala aquifer. The wells on this land have decreased up to 25 percent in output over the last 15 to 20 years.

This trend is alarming to me, and when we take into account the projections of ground water models and studies, such as the Platte River Basin Level B Study conducted by the Missouri River Basin Commission, our future for sustained irrigated agriculture is in serious jeopardy.

In addition, there are water quality problems. All of the residents and towns in the area get their drinking water from ground water. Several communities have problems because their nitrate content is above the Public Health Service's recommended maximum. I had to replace my well four years ago because it was yielding water with this same problem.

Flooding is another problem and, although not frequent, can cause a great deal of damage. There was in excess of $30,000,000.00 damage in the 1967 flood between Kearney and Columbus, much of which was in the proposed project area.

I feel the mood of the people in our rural area and in the surrounding communities of Grand Island and Kearney, have changed to the point that they are ready to face up to these challenges. We envision a project that would not only supplement irrigated water supply, stabilize ground water levels and enhance ground water quality, but would enhance municipal and rural domestic water supplies and provide fish and wildlife habitat, public outdoor recreation and flood control. One or more of these facets of the project would appeal to every citizen of our area in addition to stabilizing the economy of irrigated agriculture.

These are some of the reasons for the strong base of support the project has throughout the valley.

As you can see, we are not talking about a single purpose irrigation project, but a multi-purpose water resources project that would address all of these needs and more.

My neighbors and I support this type of project which will meet our needs for our future in irrigated agriculture. If we do not have some solutions to our challenges, we will be faced with turning irrigated acres back to dry land.

We in the Prairie Bend Unit urge you to support the continuation of the feasibility study.

Respectfully yours,

Rodney K. Gangwish
Shelton, Nebraska 68876

TESTIMONY

We as Boards of Directors of the Frenchman Valley Irrigation District and the H & RW Irrigation District would like to request funding for a 1987 Feasibility Study to be conducted by the Bureau of Reclamation for the South Platte - Frenchman Project, this being a study for groundwater recharge and supplemental water for Enders Dam.

We feel that from the Lower South Platte Basin in Eastern Colorado and Western Nebraska with direct placement of flow in the Frenchman River would be a good supplement directly to the Enders Reservoir.

The need of immediate action in behalf of the irrigators and rural businessmen in Southwest Nebraska, mainly the area served by the Enders Reservoir is most important due to the economic stress that is being placed upon our water users by not being able to supply them an adequate source to meet their irrigation needs. Some 22,000 acres which were developed years ago are suffering from this short water supply.

This way of life is most important to the future of our area and we think the economics gain for the future of this country is worth asking for support from the Federal Government, the returns from this project will be returned by the future generations of this area and we feel the necessity in trying to preserve and develop the natural resources of this country - water and agriculture.

There is evidence that this world will be going into a severe drought cycle in the 1990's according to Iowa Climatologist Paul Waite. We are asking for help now so as to be able to continue to serve the world needs in the future.

This area not being a new development but an old established area which has knowledge and equipment in which our people have invested certainly in our opinion deserves some high priority consideration.

At present time our irrigators are limited to under seven inches of irrigation water per irrigated acre.

Therefore as Boards of Directors we feel an obligation to our water-users to continue searching for any possible endeavors and ask for your support in doing so.

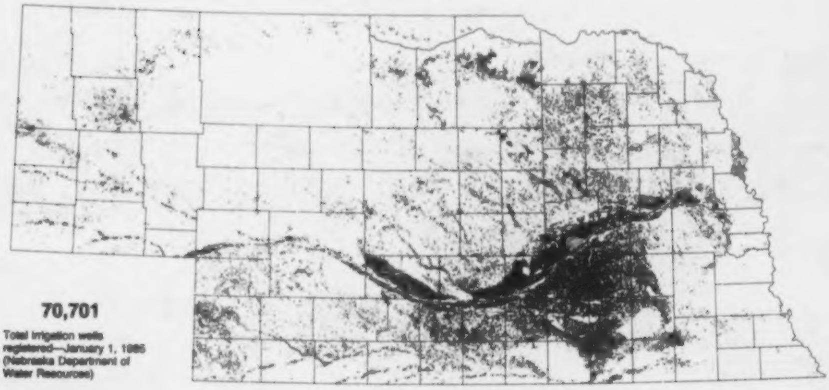
Boards of Directors
Frenchman Valley & H & RW Irrigations

Larry Swanson

Larry Swanson, President
Les Ruggles
Darold Schlegel
John Fries
Gail Sitzman
Willis Barth

Dated this 9th day of April, 1986

GROUNDWATER MAPS, 1984

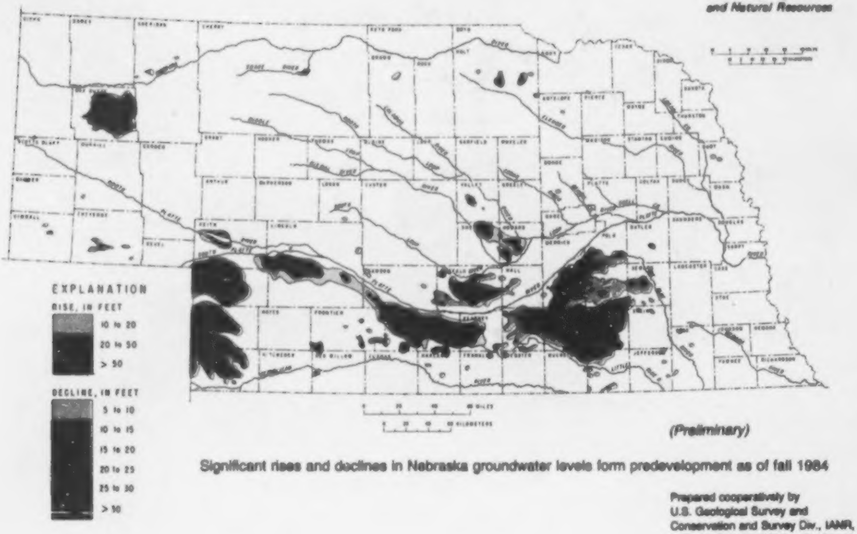


70,701

Total irrigation wells registered—January 1, 1985 (Nebraska Department of Water Resources)

Location of registered irrigation wells as of January 1, 1985

Institute of Agriculture and Natural Resources


EXPLANATION
RISE, IN FEET
10 to 20
20 to 50
> 50
DECLINE, IN FEET
5 to 10
10 to 15
15 to 20
20 to 25
25 to 30
> 30

(Preliminary)

Significant rises and declines in Nebraska groundwater levels form predevelopment as of fall 1984

Prepared cooperatively by
U.S. Geological Survey and
Conservation and Survey Div., IANR,
The University of Nebraska-Lincoln

Perkins, Chase, and
Dundy Counties

Upper Republican
Natural Resource District

Headquarters in Imperial
135 W. 5th St.
Phone 308-882-5173

RESOLUTION

The Upper Republican Natural Resource District Board of Directors unanimously adopt the following Resolution.

The District agrees to enter into an agreement with the Frenchman Valley, Frenchman Cambridge, H & RW Irrigation District and the Northeast Colorado Groundwater District to finance up to fifty percent of the first phase of a feasibility study to transfer surface water from the South Platte River to the Upper Republican River Basin in Northeast Colorado and Southwest Nebraska.

The name of the project is the South Platte - Frenchman River Project.

It is further agreed that if phase one of the study determines the project is feasible, the Districts agree that the area that is determined to receive the benefit from the purposed project will finance up to fifty percent of the remainder of the feasibility study.

A copy of the cost of the feasibility study is attached to this resolution.

Marvin Large
Chairman

Larry Kitt
Board of Director

Jerry Kuenning
Vice Chairman

Clifford Olson
Board of Director

W. Eugene Haarberg
Sec/Treas.

Ray Dean Parks
Board of Director

Jerry Brown
Board of Director

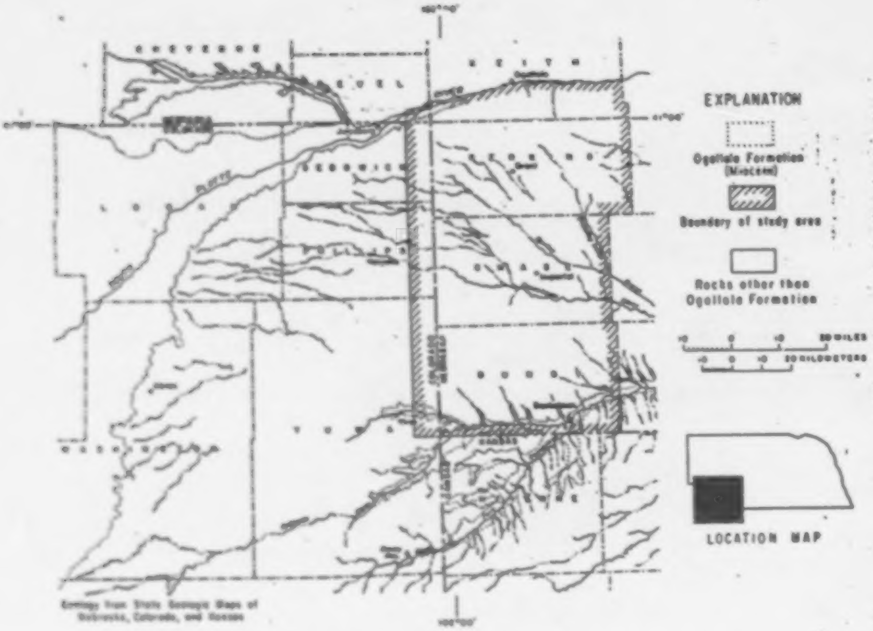
Gary Main
Board of Director

Stan Loeffler
Board of Director

Board of Director

Steve Hanson
Board of Director

Donald E. Miller
General Manager


CHEYENNE
DEUEL
KEITH
SEDGWICK
PERKINS
LOGAN
PHILLIPS
CHASE
YUMA
DUNDY
WASHINGTON
NEBRASKA
COLORADO
KANSAS
EXPLANATION
Ogallala Formation (Miocene)
Boundary of study area
Rocks other than Ogallala Formation
10 0 10 20 MILES
10 0 10 20 KILOMETERS
LOCATION MAP

Geology from State Geologic Maps of Nebraska, Colorado, and Kansas

Figure 14.--Lateral extent of the Ogallala formation in the region of the study area.

STATE OF NEBRASKA
ROBERT KERREY • GOVERNOR

January 26, 1984

Ronald R. Milner
Manager
Upper Republican NRD
135 West Fifth Street
Imperial, Nebraska 69033

Dear Ron:

Thank you for your letter of January 13, 1984 in which you are requesting a letter from the Governor's Office approving the request for a feasibility study of the Colorado-Nebraska Recharge and Supplemental Surface Water Project.

I am asking that Mr. Dayle Williamson, Executive Director of Nebraska Natural Resources Commission and Mr. Mike Jess, Director of the Nebraska Water Resources Commission communicate directly with you on this Project.

I think the proper channels to go through would involve a communication from the local sponsor, which in this case would probably be the Natural Resource District, to the Bureau of Reclamation. Following protocol and proper channels in these requests is always very important. I think we should rely on the expertise of Dayle Williamson, Mike Jess and others to advise us on the proper avenue to follow.

Sincerely,

Bill Kerrey

Bill Kerrey
Staff Assistant to the Governor

BK:cls

cc: Gordon Kissel, Nebraska Association of Resources Districts
Dayle Williamson, Director, Natural Resources Commission
Mike Jess, Director, Water Resources Commission

OFFICE OF THE GOVERNOR, BOX 94848, LINCOLN, NEBRASKA 68509-4848, PHONE (402) 471-2244
AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

DEPARTMENT OF WATER RESOURCES, BOX 94676, LINCOLN, NEBRASKA 68509-4676, PHONE (402) 471-2363
AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER M/F/H

PROGRAMS:
SOIL & WATER CONSERVATION
WATERSHED PROTECTION
COMPREHENSIVE PLANNING
FLOOD PLAIN MANAGEMENT
DATA BANK
WATER CONSERVATION FUND
DEVELOPMENT FUND

STATE OF NEBRASKA
NATURAL RESOURCES COMMISSION
301 Centennial Mall So. - 4th Floor
P.O. Box 94876
Lincoln, Nebraska 68509
Phone: (402) 471-2081

February 17, 1984

Mr. Ron Milner, Manager
Upper Republican NRD
135 West 5th Street
Imperial, NE 69033

Dear Ron:

It was good to have an opportunity to visit with you this week about the proposal for a Bureau of Reclamation feasibility study to transport South Platte river water to areas in Colorado and Nebraska for groundwater recharge. In addition, you pointed out the possibility of studying this source as a supply to supplement the water supply for the Enders Reservoir. As you indicated, the local sponsors in Nebraska would be willing to provide the cost-sharing assistance for the feasibility study that will no doubt be required by the Bureau of Reclamation. Under those conditions, our agency certainly has no objections to the initiation of this study.

We will plan to meet with Bureau officials to learn more about this proposal and determine future requirements for state participation in this activity.

Sincerely,

Dayle

Dayle E. Williamson
Executive Secretary

DEW:kt

cc: Clinton VonSeggern
Bill Kerrey
Mike Jess
Vince Dreeszen
Bill E. Martin
Robert Kutz
Bill McDonald

STATE OF NEBRASKA
ROBERT KERREY • GOVERNOR • J. MICHAEL JESS • DIRECTOR

January 23, 1984

IN REPLY REFER TO:

Mr. Ronald R. Milner, Manager
Upper Republican NRD
135 W. Fifth Street
Imperial, Nebraska 69033

Dear Ron:

RE: Colorado-Nebraska Recharge Study

I have no objection to the Upper Republican NRD requesting the Bureau of Reclamation perform a feasibility study. In pursuing the study, please bear in mind that this endorsement does not include an automatic obligation for technical or financial assistance from this agency.

Sincerely,

DEPARTMENT OF WATER RESOURCES

Michael Jess

J. Michael Jess
Director

JMJ:ch
cc: Governor Kerrey

Perkins, Chase, and
Dundy Counties

Upper Republican
Natural Resource District

Headquarters In Imperial
135 W. 5th St.
Phone 308-882-5173

March 12, 1986

Virginia Smith
Third District
2202 Rayburn House Bldg.
Washington, D.C. 20515

Honorable Virginia Smith:

This letter is in regard to your letter dated March 6, 1986 in reference to the South Platte-Frenchman project.

The District is very interested in starting the feasibility study as soon as possible. We would appreciate it if you would ask your subcommittee to add funding for the first part of this study for fiscal year 1987.

The inflow into Enders Dam is continuing to decrease and ground water levels are declining in this area, even with the rules and regulations that are in force.

The first part of the study will cost $200,000. The Districts involved have agreed to fund 50 percent or $100,000.

Eugene Haarberg and I are planning a trip to Washington, D.C. April 5-11, 1986. We would like to meet with you on this matter at your convenience. Please contact me if more information is needed.

Sincerely,

Ronald R Milner

Ronald Milner, Manager
for the Board of Directors

srh

Perkins, Chase, and
Dundy Counties

Upper Republican
Natural Resource District

Headquarters In Imperial
135 W. 5th St.
Phone 308-882-5173

January 13, 1986

Virginia Smith
Third District
2202 Rayburn House Bldg.
Washington, D.C. 20515

Honorable Virginia Smith:

The enclosed material pertains to the proposed project that Eugene Haarberg and I presented to you in your office is Washington, D.C., in April of 1985.

I apologize for taking so long to get this material to you. We have had some delays because of the closing of the Bureau of Reclamation Regional Office in Denver, Colorado.

The Bureau of Reclamation has stated that they will do the feasibility study. The enclosed draft of the cost of the study is proposing 50 percent Federal funding and 50 percent local funding. The 50 percent local funding will be split 50 percent Colorado Groundwater Districts and 50 percent Nebraska Groundwater and Surface Water Districts.

The proposed feasibility study may not be one of the studies recommended for funding by the Administration for Fiscal Year 1987. We would appreciate it very much if you would recommend funding for this study in Fiscal Year 1987, if it is not recommended for funding by the Administration.

The State Association of Natural Resources Districts will be going to Washington, D.C., April 5-11, 1986. The District will be represented by a board member and myself. We would appreciate it if we could meet with you and your staff and answer any questions you may have on the proposed feasibility study.

As you are aware, the groundwater in the Ogallala Aquifer is on the decline, thus causing several economical hardships. The cost of operations is rising to the individual operators due to increased groundwater pumping lifts, irrigated lands are going out of production, and stream flows to surface water rights are decreasing. Studies indicate that the groundwater may decline as much as 80 feet by the year 2000, and surface water inflow into Enders Dam may decrease to the point by the mid-1990's that there will not be any surface water available for irrigation. Recreation and wildlife habitat will also be adversely affected. The urgency of the feasibility study is very important for these reasons.

We would appreciate your support, and please contact either me or the Bureau of Reclamation if more information is needed.

Sincerely,

Ronald R. Milner
Ronald R. Milner, Manager
for the Board of Directors

slm

Enclosures

HANK BROWN
4TH DISTRICT, COLORADO
COMMITTEES:
BUDGET
JUDICIARY
INTERIOR AND INSULAR AFFAIRS
(ON LEAVE)

Congreſs of the United States
House of Representatives
Washington, DC 20515

OFFICE ADDRESS:
1510 LONGWORTH BUILDING
WASHINGTON, DC 20515
(202) 225-4676
DISTRICT OFFICES:
1015 37TH AVENUE COURT
SUITE 101A
GREELEY, CO 80634
(303) 352-4112
301 S. HOWES, ROOM 203
FORT COLLINS, CO 80521
(303) 493-9132
243 POST OFFICE BUILDING
LA JUNTA, CO 81050
(303) 384-7370
ROOM 9, 230 MAIN STREET
BOX 767
FORT MORGAN, CO 80701
(303) 867-8909
ADAMS AND ARAPAHOE COUNTY
(303) 466-3443
TRINIDAD
(303) 846-6685

March 14, 1986

Ben Saunders, Manager
Frenchman Ground Water Management District
P. O. Box 113
Holyoke, Colorado 80734

Dear Mr. Saunders:

Thank you for your letter regarding FY 1987 funding for a feasibility study on the South Platte-Frenchman Project.

Enclosed are copies of letters that I have written to Tom Bevill, the Chairman of the Appropiations Subcommitee on Energy and Water Development, and to John Myers, the Ranking Minority Member on the Subcommittee. I have requested that the Subcommittee support the recharge feasibility study. When my office receives a response, we will send you a copy of it.

Your continued interest in the project is appreciated.

Sincerely,

Hank Brown
Member of Congress

HB/rk

Enclosures

cc: George Kerst, Chairman

HANK BROWN
4TH DISTRICT, COLORADO

COMMITTEES:

BUDGET

JUDICIARY

INTERIOR AND INSULAR AFFAIRS
(ON LEAVE)

Congress of the United States
House of Representatives
Washington, DC 20515

D.C. OFFICE:
1510 Longworth Building
Washington, DC 20515
(202) 225-4676

DISTRICT OFFICES:
1015 37th Avenue Court
Suite 101A
Greeley CO 80634
(303) 352-4112

301 S. Howes Room 303
Fort Collins CO 80521
(303) 493-9132

243 Post Office Building
La Junta, CO 81050
(303) 384-7370

Room B, 230 Main Street
Box 743
Fort Morgan, CO 80701
(303) 867-8909

Adams and Arapahoe Counties
(303) 466-3443

Trinidad
(303) 846-8685

March 14, 1986

The Honorable John T. Myers
Ranking Minority Member
Subcommittee on Energy and Water Development
Committee on Appropriations
2372 Rayburn House Office Building
Washington, D. C. 20515

Dear Congressman Myers:

I am writing to request that the Energy and Water Development Subcommittee support a feasibility study in FY 1987 for a project which would import water from the South Platte River to recharge the Ogallala Aquifer. The request was made in the Bureau of Reclamation's FY 1987 list of new water project starts.

The Bureau of Reclamation has indicated that the first stage of the feasibility study, or fifteen months, would cost approximately $200,000. The entire four year study is expected to cost approximately $1 million. A number of water districts from Northeastern Colorado and Southwestern Nebraska are interested in this project. The Districts have agreed to fund fifty percent of the costs. They are currently seeking federal assistance for the other fifty percent needed to complete the study.

There is wide local support for the recharge of the Ogallala Aquifer, in both Colorado and Nebraska, and there is believed to be water available for diversion by such a project. The Ogallala Aquifer is currently declining and the need for a water supply is great in that arid region. Your help in assuring that the study is completed would be very much appreciated.

Sincerely,

Hank Brown
Member of Congress

HB/rk

HANK BROWN
4th District Colorado

Committees:

Budget

Judiciary

Interior and Insular Affairs
(On Leave)

Congress of the United States
House of Representatives
Washington, DC 20515

Office Address:
1510 Longworth Building
Washington, DC 20515
(202) 225-4676
District Offices:
1015 27th Avenue Court
Suite 101A
Greeley, CO 80634
(303) 352-4112
301 S. Howes Room 203
Fort Collins, CO 80521
(303) 493-9132
243 Post Office Building
La Junta, CO 81050
(303) 384-7370
Room 9, 230 Main Street
Box 787
Fort Morgan, CO 80701
(303) 867-8909
Adams and Arapahoe County
(303) 466-3443
[illegible]
(303) 848-6655

March 14, 1986

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
2362 Rayburn House Office Building
Washington, D. C. 20515

Dear Chairman Bevill:

I am writing to request that the Energy and Water Development Subcommittee support a feasibility study in FY 1987 for a project which would import water from the South Platte River to recharge the Ogallala Aquifer. The request was made in the Bureau of Reclamation's FY 1987 list of new water project starts.

The Bureau of Reclamation has indicated that the first stage of the feasibility study, or fifteen months, would cost approximately $200,000. The full four year study is expected to cost approximately $1 million. A number of water districts from Northeastern Colorado and Southwestern Nebraska are interested in this project. The Districts have agreed to fund fifty percent of the costs. They are currently seeking federal assistance for the other fifty percent needed to complete the study.

There is wide local support for the recharge of the Ogallala Aquifer, in both Colorado and Nebraska, and there is believed to be water available for diversion by such a project. The Ogallala Aquifer is currently declining and the need for a water supply is great in that arid region. Your help in assuring that the study is completed would be very much appreciated.

Sincerely,

Hank Brown
Member of Congress

HB/rk

frenchman ground water
management district
P.O. Box 113
Holyoke,
Colorado
80734

March 3, 1986

Congressman Hank Brown
1510 Longworth Building
Washington, DC 20515

Dear Congressman Brown:

On behalf of the South Platte-Frenchman Project I am writing you asking you to consider writing the project into the 1987 budget.

We have been informed that it did not make the administrations 1987 budget and would sincerely like to get the feasibility study started in 1987, if possible.

We are of the understanding that this attempt to write in into the budget must be accomplished prior to the third week of March.

Thanking you for all your cooperation,

Sincerely,

Ben Saunders

Ben Saunders
Manager

cc: George Kerst - Chairman

Perkins, Chase, and
Dundy Counties

Upper Republican
Natural Resource District

Headquarters in Imperial
135 W. 5th St.
Phone 308-882-5173

January 13, 1986

Dayle E. Williamson, Chairman
Nebraska Water Management Board
Natural Resources Commission
301 Centennial Mall South
P.O. Box 94876
Lincoln, NE 68509-4876

Dear Sir:

Subject: A request for feasibility study for groundwater recharge and supplemental surface water for Enders Dam.

Name of Project: South Platte - Frenchman Project

Sponsors: The Frenchman and the Marks Butte Groundwater District, Northeast Colorado; The Frenchman Valley, H & RW and Frenchman Cambridge Irrigation District and the Upper Republican Natural Resources District, Southwest Nebraska.

The purpose of this proposed project is to recharge the declining Ogallala Aquifer in Northeast Colorado and Southwest Nebraska, and supplement the declining surface water inflows in to Enders Dam.

A preliminary study indicates that surface water can be pumped out of the South Platte River northeast of Sterling, Colorado, with approximately 300 feet left and transported in a canal to four dam sites in Northeast Colorado. Water from the proposed dam sites will gravity flow east toward the Nebraska-Colorado line, with overflows running into the upper reaches of the Frenchman River.

The intent of this project is to supplement existing irrigated acres, replentish surface water into the Frenchman River, recharge the aquifer, and not to add additional irrigated acres.

The following are some of the reasons we feel this study is important to the economy of Nebraska and Colorado, and the area involved in the proposed study:

This basin is a closed basin with a large area of aquifer suitable for recharge.

The U.S. Geological Survey from Denver is presently doing a three-year study on groundwater recharge in the District.

A quantitative hydrogeology study was completed by the U.S. Geological Survey of the Upper Republican Natural Resources District.

Groundwater declines of over 30 feet have occurred in the District. Inflow from the Frenchman River has decreased by 60 percent, with projection of 90 percent by the mid 1990's, in to Enders Dam.

The District has been monitoring groundwater levels in this area for the past 15 years.

Studies estimate a number of irrigated acres will revert back to dryland farming by the year 2000.

There is a considerable amount of support for this project in both Colorado and Nebraska. This area would be willing to fund a portion of this project.

Rules and regulations that are in effect to control the use of groundwater:

The Upper Republican Natural Resources District was designated a Groundwater Control Area by the Director of the Department of Water Resources, which went into effect on August 1, 1977. The District has implemented the following rules and regulations: allocation of groundwater for each irrigated acre; well spacing more restrictive than State Statutes; designation of critical townships where groundwater levels are declining more than three quarters of one percent.

Colorado has implemented a well spacing requirement based on the amount of available groundwater. This procedure sets a life goal for the use of the aquifer.

The Frenchman Valley and H & RW Surface Water Irrigation District, which receives surface water from Enders Dam, are limited to under seven inches of irrigation water per irrigated acre.

Enclosed is the cost flow chart, a map of the proposed project, and the definitions of the abbreviations.

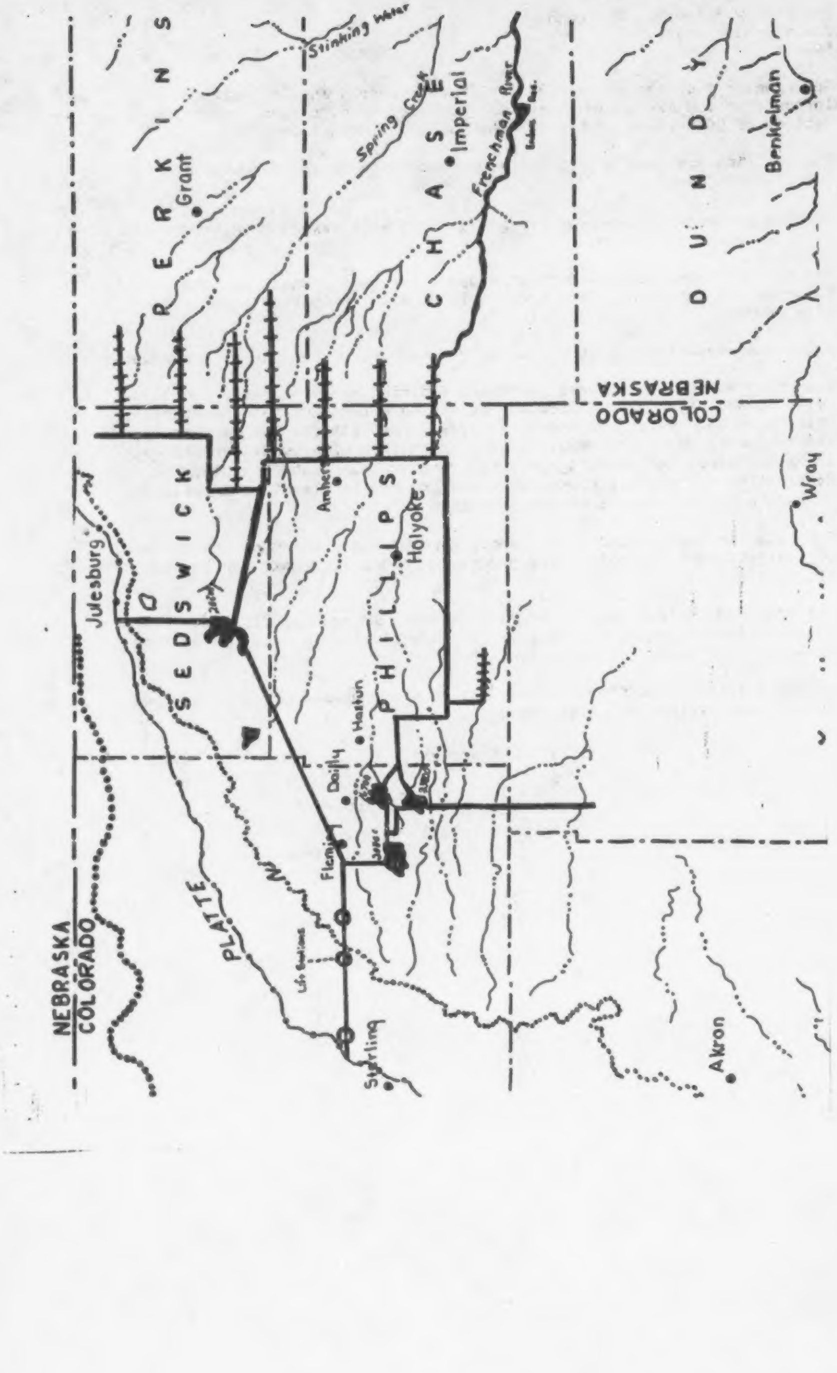
Sincerely,

Ronald R. Milner

Ronald R. Milner
for the Board of Directors

slm

Enclosures


NEBRASKA
COLORADO
PERKINS
Grant
Stinking Water
Spring Creek
CHASE
Imperial
Frenchman River
DUNDY
Benkelman
NEBRASKA
COLORADO
SEDGWICK
Julesburg
PHILLIPS
Holyoke
Amherst
Haxtun
Dailey
Fleming
PLATTE
Sterling
Akron
Wray

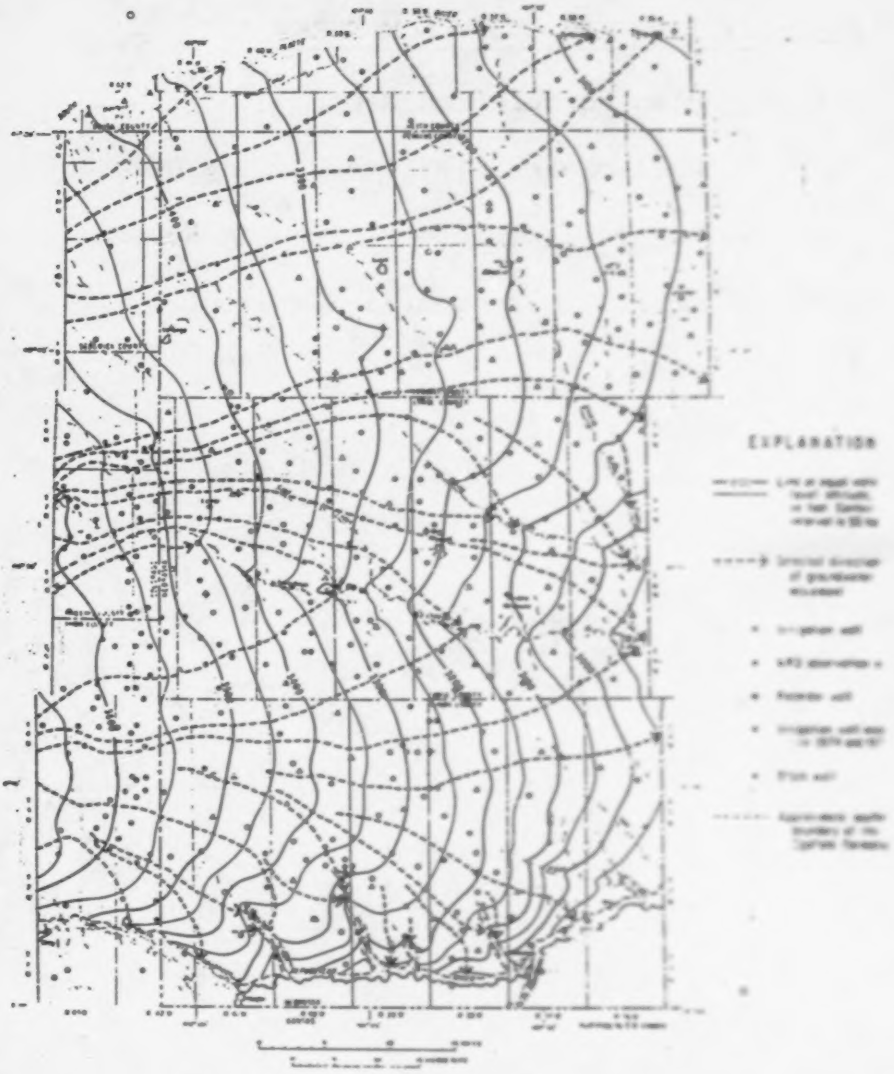


Figure 15.—Configuration of hydraulic head in the aquifer in the spring of 1975, showing general directions of ground-water movement.

ABBREVIATIONS FOR COST FLOW SHEET

PFR - Plan Formulation Report

PFWD - Preliminary Findings Working Document

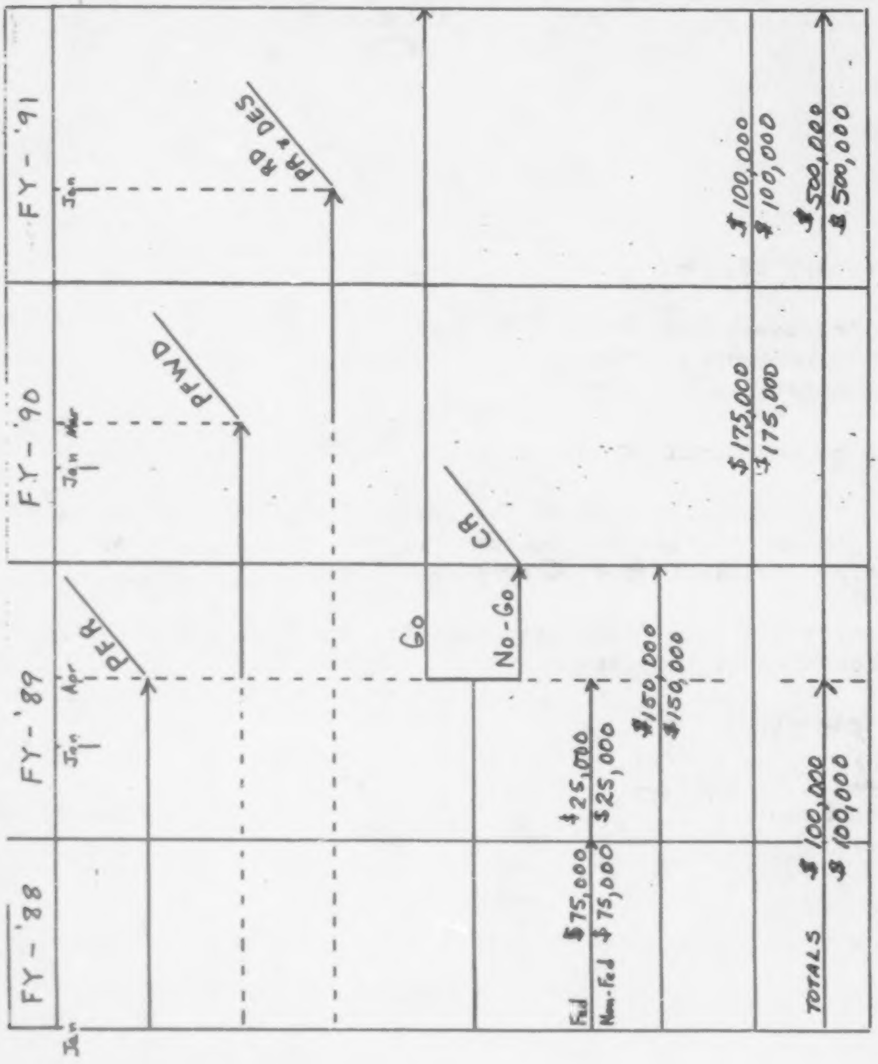
RDPR - Regional Directors Planning Report

DES - Draft Environmental Statement

7-1654 (7-73)
Water and Power

COMPUTATION SHEET

BY	DATE	PROJECT	SHEET ____ OF ____
CHKD BY	DATE	FEATURE	
DETAILS			



frenchman ground water management district
P.O. Box 113
Holyoke.
Colorado
80734

January 20, 1986

Congressman Hank Brown
1510 Longworth Building
Washington D.C. 20515

Dear Congressman Brown:

In preparing and mailing the letter from Chairman George Kerst of the South Platte-Frenchman Project, I did leave out the referenced letters to Congressman Bevill.

Enclosed please find these letters, and I am sorry for any inconviences this has caused.

Sincerely,

Ben Saunders

Ben Saunders
Manager

HANK BROWN
4TH DISTRICT, COLORADO

COMMITTEES

BUDGET

JUDICIARY

INTERIOR AND INSULAR AFFAIRS
(ON LEAVE)

Congress of the United States
House of Representatives
Washington, DC 20515

[illegible]
[illegible] Building
Washington, DC 20515
[illegible]
[illegible]
[illegible]
Suite 101A
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[illegible]
Box 787
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[illegible]

January 9, 1986

George Kerst, Chairman
South Platte-Frenchman Project
Sandhills Ground Water Management District
P. O. Box 311
Wray, Colorado 80758

Dear Mr. Kerst:

Thank you for your letter regarding the South Platte-Frenchman Project. It was kind of you to a update me on the status of the project.

As you may know, the President will submit his FY 1987 budget request to Congress early in February. We will know at that time whether the South Platte-Frenchman Project has been included in the President's proposal. In the meantime, my office has contacted the Bureau of Reclamation to indicate my interest in FY 1987 funding for the feasibility study.

It was kind of you to write and apprise me of the district's continued efforts to obtain federal money for the water project; however, your letter indicated that you were enclosing 1985 letters from the State of Colorado to Congressman Bevill about the funding. My office did not receive those letters. If you would like to send those letters to me, I will add them to your correspondence.

Sincerely,

Hank

Hank Brown
Member of Congress

HB/rk

STATE OF COLORADO RICHARD D. LAMM Governor
DEPARTMENT OF NATURAL RESOURCES
DAVID H. GETCHES, Executive Director
1313 Sherman St., Room 718, Denver, Colorado 80203 866-3311

Geological Survey
Board of Land Commissioners
Mined Land Reclamation
Division of Mines
Oil and Gas Conservation Commission
Division of Parks & Outdoor Recreation
Soil Conservation Board
Water Conservation Board
Division of Water Resources
Division of Wildlife

May 31, 1985

Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Representative Bevill:

A number of groundwater management districts in Northeastern Colorado have asked that funds be included in the Bureau of Reclamation's budget to pursue a feasibility study of a project to import water from the South Platte River to recharge and supplement the Ogallala aquifer. As you know, the Ogallala aquifer is an extremely valuable resource to the nation as well as to the state of Colorado. It is suffering continued depletion and is largely without a source of natural replenishment.

The state of Colorado believe that it is highly desirable to develop facts needed to determine whether it is feasible to recharge the Ogallala aquifer.

I understand that your committee will soon be marking up the fiscal 1986 energy and water development appropriations bill. The state of Colorado supports funding of a feasibility study for recharge and supplementation of the Ogallala aquifer from South Platte River water. Of course we do not want this funding to be at the expense of our expressed priorities for federal funding for construction of water projects within Colorado.

Sincerely,

David H Getches

DAVID H. GETCHES
Executive Director

DHG:car
cc: Representative Hank Brown ✓
Mr. Benjamin G. Saunders ✓
Mr. George Kerst
Mr. Bill E. Martin
Mr. Michael D. Shimmin
6473

STATE OF COLORADO

COLORADO WATER CONSERVATION BOARD
Department of Natural Resources

721 State Centennial Building
1313 Sherman Street
Denver, Colorado 80203
Phone: (303) 866-3441

Richard D. Lamm
Governor
J. William McDonald
Director
David W. Walker
Deputy Director

June 11, 1985

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
2362 Rayburn House Office Building
Washington, D. C. 20515

Re: South Platte River - Ogallala Aquifer Water Import Project

Dear Chairman Bevill:

It is my understanding that your committee is preparing to mark up the F. Y. 86 Energy and Water Development Appropriations Bill. I have been contacted by a group which includes several groundwater management districts in northeastern Colorado regarding a request for funds to be included in the Bureau of Reclamation's budget to pursue a feasibility study of a proposed project to import water from the South Platte River to recharge and supplement the Ogallala Aquifer.

The Ogallala Aquifer is a valuable resource to the State of Colorado and its continuing depletion is of concern to this state. We should develop the facts needed to determine whether it can feasibly be recharged and/or supplemented at the earliest possible time. To that end, and without taking any position on the ultimate merits of this project, I support the request of these districts for funding of this feasibility study. Please also understand that this is not a modification of any existing position of this Board regarding priorities for federal construction funding for authorized water projects within Colorado.

Thank you for your consideration.

Sincerely,

J. William McDonald

J. William McDonald
Director

JWMcD:mm

cc: Representative Virginia Smith
Representative Hank Brown
Mr. George Kerst
Mr. Benjamin G. Saunders
Mr. Bill E. Martin
Mr. Michael D. Shimmin
Mr. Jeris Danielson
Mr. David Getches
Mr. Herb Vandemoer

Sandhills Ground Water Management District
P. O. Box 311
WRAY, COLORADO 80758

December 20, 1985

Congressman Hank Brown
1510 Longworth Building
Washington, D.C. 20515

Dear Congressman Brown:

You will remember that the water districts of Northeastern Colorado and Eastern Nebraska attempted getting funding thru your office to do a feasibility study on the South Platte-Frenchman Project in FY 1986. This effort failed at that time, but the request is in the Bureau of Reclamations 1987 list of new water project starts.

To bring you up to date on the South Platte-Frenchman Project, it is a project designed to bring excess South Platte Waters to the Ogallala Aquifer and to recharge and/or supplement irrigation waters and in the large picture, attempt keeping the "life blood, water" in Northeastern Colorado. The only source for domestic, livestock and municipal water is contained in the Ogallala Aquifer for these communities, so you can see this is not simply and strictly an irrigation project, It could be called a reclamation project.

We have been informed by the Bureau that the first stage of the feasibility study, or 15 months, would cost approximately $200,000 which would give us a very good indication as to the viability of the project. The full four year study would cost approximately one million dollars.

The proponents of the project (Marks Butte, Frenchman, Sandhills, Central Yuma County and W-Y Ground Water Management Districts of Colorado and in Nebraska, the Upper Republican Natural Resource District, the Frenchman-Cambridge Irrigation District, the H & R W Irrigation District and others who depend upon the Enders Reservoir for irrigation waters) are aware we will be required to fund 50% of this study. We have agreed that our 50% cost share will be equally split between the Colorado and Nebraska proponents. Speaking for the Colorado proponents, we have taken the necessary steps toward

December 20, 1985

Congressman Brown

Page 2

obtaining our share of the cost sharing by budgeting an amount for 1986 and 1987 to cover this cost in 1987 FY. I have been informed that the Nebraska proponents are doing likewise. So you can see, we are ready for a 1987 start on the feasibility if the Bureau can get the red light to proceed.

Our request to you is to support the funding for this project if it makes the administrations 1987 list of new water starts, but if it does not make the list, we would appreciate your consideration of writing the project into the FY 1987 budget. We will be willing to come to Washington to testify at any time needed.

I am enclosing copies of letters from the State of Colorado that were sent to Congressman Tom Bevill in 1985 indicating their position in this matter.

Everything you have done in support of us in the past has been greatly appreciated and we sincerely hope you and your family have a happy holiday season.

Sincerely,

George H. Kerst

George Kerst
Chairman
South Platte-Frenchman Project

Written Testimony
for the
April 16, 1986 Meeting

of

The House Appropriation Subcommittee
on
Energy and Water Development

Prepared by

Dr. William L. Powers
Director, Water Resources Center
University of Nebraska - Lincoln
Lincoln, Nebraska

INTRODUCTION

Thank you for allowing me to submit written testimony before the Subcommittee on Energy and Water Development, House (Senate) Committee on Appropriations. This testimony is for support of a Northern Great Plains Solute Movement Laboratory needed to address groundwater quality problems beginning to concern the public. This proposal has the support of the University of Nebraska Board of Regents and the Governor's Office as seen by the attachments.

The use of agricultural chemicals in agricultural production has increased greatly during the past ten to fifteen years over the Northern Great Plains. In Nebraska alone some 30,000,000 lbs. of pesticide and 200,000,000 lbs. of fertilizer are used annually. Several instances of nitrate contamination have been reported in Nebraska. Some herbicides are now beginning to be detected in the groundwater.

Such reports of groundwater contamination have increased greatly over the past decade. This is partly due to more chemicals reaching the groundwater and partially due to better instrumentation that allows the measurement of chemicals in ever smaller amounts (parts per trillion in some instances). Nevertheless, the increasing number of contamination reports has created a concern for the health of those using groundwater as a source of drinking water.

As a result of this concern, the U.S. Environmental Protection Agency released a Groundwater Protection Strategy in 1984. The State of Nebraska also released a Nebraska Groundwater Quality Protection Strategy (one of the first in the nation) in February of 1985. Both of these strategies stress that remedial measures are extremely difficult and expensive. They stress pollutant source management and control as the most promising way of protecting groundwater.

In order to control (or manage) the sources of groundwater contamination, best management practices (BMP's) need to be developed and adopted. To develop BMP's, the fate and movement of chemicals (solutes) must be understood and predictable. This understanding and prediction capability can be accomplished through historical examination of past management practices and groundwater monitoring, development and calibration of simulation models, or controlled application coupled with extensive measurements. A combination of these is probably most desirable.

An interdisciplinary team of scientists having close access to a field research site and chemical analysis facilities is necessary to develop this understanding and prediction capability of the fate and movement of chemicals, i.e., a Solute Movement Laboratory needs to be established. The National Center for Groundwater Research (a consortium of universities in Texas and Oklahoma) partially serves this purpose for the Southern Great Plains region. However, no such facility exists for the Northern Great Plains area which differs in geology, climate, soils and agriculture practices from the southern region.

This is a proposal to establish a facility for the study of the fate and movement of chemicals through and below soils common to the Northern Great Plains region. Such a facility could be called a Solute Movement Laboratory and consists of a chemical analysis laboratory at the University of Nebraska in Lincoln with field laboratories in North Platte and perhaps surrounding states of the Northern Great Plains. The whole system would be called the Great Plains Solute Movement Laboratory.

To study the fate and movement of chemicals in soils and aquifers, scientists would sample the soil solution and the aquifer below field laboratory sites to which the chemicals have been added. These field sites would be heavily instrumented and monitored. Because sophisticated instruments would be needed to analyze the samples for the array of chemicals being applied, they would be sent to the chemical analysis laboratory at the University of Nebraska in Lincoln. The anlysis laboratory would serve as the focal point and center of coordination for solute movement studies in the Northern Great Plains.

FIELD LABORATORY SITES

The facility at North Platte is an example of a typical field laboratory. Land owned by the University and cooperators will be available to be used as a field research site. The North Platte area has soils typical of the Northern Great Plains region. The site will be instrumented and operated so as to sample the soil, soil solution and groundwater. To support the research, other sites operated by the University and on surrounding farms, space for sample preparation, as well as office space for addtional professional staff, will be constructed near the headquarters of the West Central Research and Extension Center.

Initially the hydrologic and chemical characteristics of the field site will be determined. Some of the many models developed elsewhere to predict the fate and movement of the common agricultural chemicals will be calibrated for the experimental site characteristics. The site will be intensively instrumented. Soil and water will be sampled under various management systems. The samples will be analyzed at the University of Nebraska in Lincoln so as chemicals are added to the soil their fate and movement can be traced as the water migrates to and through the groundwater.

Early research activity will be directed toward developing best management practices for an emerging technology called "chemigation", where chemicals are applied through an irrigation system. Irrigation sytems will be evaluated for their efficiency of application as well as devices for preventing direct spills down the well to the groundwater from a malfunction. The use and effectiveness of various chemicals and application rates for different cropping systems will be evaluated.

Past chemical application times and rates by cooperating private irrigators will be determined from their records. These will be compared with the analysis of soil and groundwater samples. This will provide an indication of the fate and movement of previously applied chemicals to supplement information to be obtained as controlled study sites become operational.

THE CHEMICAL ANALYSIS LABORATORY

The laboratory facility in Lincoln will house hydrologists, hydrochemists, chemists, hydrophysicists, soil scientists, weed scientists and entomologists, as well as support personnel (graduate students, electronic technician, glass blower, etc.) and their equipment. The building to house the laboratory should have the basics necessary for a 780 VAX computer room, sediment sorption labs, wet labs with purified water systems, GC mass spectroscopy lab, light gas isotope ratio lab (constant temperature), conference room, offices, electronic and glass blowing shop. Such instruments as a GC mass spectrometer, atomic adsorption unit, radium mass spectrometer are needed to analyze the samples from the field sites. Because of the great array of chemicals to be quantified and the sophisticated instruments needed, only one such centralized analytical laboratory is practical for the region. Presently many samples are sent outside the region for analysis.

ESTIMATED BUDGET

The cost of the centralized analytical laboratory (including the necessary instrumentation and lab equipment) is estimated to be $2,550,000 of which $250,000 is from non-federal sources.

The cost of the fully instrumented North Platte field site is estimated to be $1,718,300 of which $770,000 will be from non-federal sources. An additional $751,700 would be needed to expand the laboratory and office facilities at the West Central Nebraska Research and Extension Center headquarters at North Platte. The operation of the North Platte Field Site and the Lincoln Analytical Laboratory would be funded from a combination of state, private and federal sources. Of the estimated $4,000,000 of state operating funds for the next five years, about $2,361,500 would be from redirection of existing funds. The remaining $1,700,000 will be sought from state appropriations as part of an accelerated hydrology program endorsed by a Board of Regents resolution (see attachment). Of the $1,985,000 in private funds, an estimated $1,295,000 is pledged including the land for the field site. The operating support from federal sources would be from such agencies as the U.S. Geological Survey, the U.S. Environmental Protection Agency and the National Science Foundation in the amount of about $1,000,000 in research grants over the next five years (this amount is typical of previous grants). The total cost of the Northern Great Plains Solute Movement Laboratory would depend upon the number of field laboratory sites.

The above breakdown shows a cost share of a little over 54% by non-federal sources in the total cost of facilities and operation.

ESTIMATED FIVE YEAR BUDGET

ESTIMATED FIVE-YEAR BUDGET FOR A SOLUTE MOVEMENT LABORATORY SYSTEM
UNIVERSITY OF NEBRASKA PRIVATE GRANTS/GIFTS AND FEDERAL SUPPORT

	State	Private	Federal Water Grants	Special Federal Funds	TOTAL
UN-L Campus-Solute Movement Analytical Laboratory					
Staff Support (5 professional, technician, operating)	$2,500,000	200,000			$2,700,000
Laboratory/Office Development				1,090,000	1,090,000
Equipment, Instrumentation	250,000			1,210,000	1,460,000
Special Project Support		975,000	1,000,000		1,975,000
TOTALS	$2,750,000	1,175,000	1,000,000	2,300,000	$7,225,000
West Central Research & Extension Center Field Solute Movement Laboratory					
Staff support (2 professional, technician, operating)	$ 961,500				$ 961,500
Laboratory/Office Development		300,000		751,700	1,051,700
Field Lab Land		320,000			320,000
Field Lab Buildings	300,000	50,000			350,000
Equipment, Instrumentation	50,000	50,000		948,300	1,048,300
Special Project Support		90,000	75,000		165,000
TOTALS	$1,311,500	810,000	75,000	1,700,000	$3,896,500
GRAND TOTALS	$4,061,500	1,985,000	1,075,000	4,000,000	$11,121,500

RESOLUTION PASSED BY THE BOARD OF REGENTS
Of The University of Nebraska

Presented By

Regent Robert G. Simmons, Jr.
January 18, 1986

WHEREAS, the State of Nebraska has the largest underground water resources in the United States, with the accruing agricultural/industrial opportunities and natural resource responsibilities; and,

WHEREAS, there is a growing national concern for the protection of groundwater quality, both from general industrial pollution and from the extensive use of fertilizers and pesticides in commercial agriculture through direct applications to the land through irrigation systems; and,

WHEREAS, existing or proposed regulatory legislation is not supported by an adequate research base related to the control of water quality and groundwater use; and,

WHEREAS, the University of Nebraska has responsibilities to generate basic research, educational programs and management practices for commercial applications; and,

WHEREAS, the Board of Regents has previously recognized the importance of research and educational responsibilities in the field of water, by stating in the Agriculture 2001 Report: "We recommend a greatly enhanced program in the teaching, research and extension with a major emphasis on research to include water management, water quality ...."; and,

WHEREAS, the water science curriculum of the University of Nebraska-Lincoln should be strengthened to be commensurate with the research evidence and educational programs for Nebraska citizens regarding water quality protection and water use;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Regents of the University of Nebraska:

1. Recognizes the importance and high priority of a strong water science graduate program at UNL.
2. Endorses existing plans to strengthen Hydrology graduate programs at UNL through reallocation of resources, requests for additional state funds, and proposals for outside grant and contract funds.
3. Encourages the development of a proposal for federal funding, to be submitted to the most appropriate agency, to support a Northern Great Plains Solute Movement Laboratory in Nebraska.

STATE OF NEBRASKA
ROBERT KERREY • GOVERNOR

February 28, 1986

The Honorable Virginia Smith
U.S. House of Representatives
1005 Longworth Building
Washington, D.C. 20515

Dear Virginia:

This is to endorse the concept of a Northern Great Plains Solute Movement Laboratory being presented to you by a group of citizens from North Platte and the University of Nebraska.

As you know, this office has been very interested in protecting the ground water quality of the State of Nebraska. We have been working closely with the U.S. Environmental Protection Agency (EPA) over the past few years. The Nebraska Department of Environmental Control (DEC), EPA and the University of Nebraska-Lincoln (UNL) co-sponsored a workshop in 1984 on research and educational needs relating to ground water protection.

In 1985 Nebraska became one of the first states to develop a Ground Water Quality Protection Strategy and, in fact, became the first state to receive a federal ground water quality grant. The Department of Environmental Control was instrumental in developing this strategy and has assumed a leadership role in legislation and programs focused at protecting the quality of Nebraska's valuable ground water resource.

We also find that the citizens of the state, along with industry in the region, are interested in maintaining a good supply of fresh ground water. For example, a group of citizens have recently formed a Nebraska Groundwater Foundation and the Burlington Northern Railroad Foundation has given the University a grant to study the impacts of the new technology of chemigation. This grant, along with funds from EPA, has resulted in a National Chemigation Workshop with proceedings to be published soon.

This interest has been a key to the emerging reputation for Nebraska as a leader in developing programs for wise, safe and efficient use of agricultural chemicals. We feel that the establishment of a Northern Great Plains Solute Movement Laboratory in Nebraska will greatly enhance the protection of the ground water in the region while allowing for the continued use of these agricultural chemicals so important to the economy of the region. This laboratory will also assist Nebraska in the attainment of the goals outlined in our Ground Water Protection Strategy.

I support the concept presented in the proposal for a Northern Great Plains Solute Movement Laboratory and the need to shape Nebraska's ground water quality protection programs based on site-specific research. I also support strong coordination between the Department of Environmental Control, U.S. EPA and the University so as to assure research focused toward the most immediate ground water protection needs.

If this office can be of service as you seek federal funds for this laboratory, please feel free to contact me.

Sincerely,

Robert Kerrey
Governor

WEDNESDAY, APRIL 16, 1986.

PAPILLION CREEK PROJECT

WITNESSES

HON. HAL DAUB, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA
JAMES H. SUTTLE, OMAHA DIRECTOR OF PUBLIC WORKS
BERNIE SIMON, OMAHA CITY COUNCIL MEMBER
MEL HOIER, WASHINGTON COUNTY REPRESENTATIVE
MILTON FRICKE, SARPY COUNTY REPRESENTATIVE

Mr. DAUB. We are very pleased to take a brief amount of time, knowing the time that you personally, your colleagues on the committee, and staff, devote in a way that is unique. I don't think that there is a committee in the Congress that hears as many witnesses, as I am often reminded by Virginia Smith.

You give so much personal attention and care to each of these projects, so important to each region, each State and each locale.

You are familiar with our project. The Papillion Creek situation has been a classic Hatfield and McCoy argument for 16 years, a shootout between the north and south, and tough on the people in the middle.

The common goal of all was to develop a flood plain control plan for a difficult stretch of terrain west of the Missouri River in the Omaha, Nebraska area, and it deals with the way in which this little creek and its tributaries flow through that city, and it has a confluence in the south of Omaha, in Bellevue, where Strategic Air Command headquarters is located, and its reaches go into the north part above Omaha.

And in 1965, some years ago, there was the last in a series of very devastating floods, massive amounts of property damage and loss of life.

This project was designed by the Corps many years ago to have contained some 51 structures, and has been down-sized by local controversy ever since, as to whether or not there should or should not be a variety of structures built in certain locations.

Because of that controversy this committee has said, until you solve your own problem and come to a common agreement, we really, as a committee, are not going to go forward.

I want to report to you that as a result of this committee's authorization of funds to—through the Corps of Engineers, put together the PAPIO Watershed Coordinating Committee, made up of 11 voting members, sponsored by the Natural Resources District, supported by the City of Omaha, the Mayor, two Administrations, local units, three counties involved, Douglas, Washington and Sarpy Counties.

And we put 11 people in the room, and they talked it out, and the good will of the four who are here today to testify, as well as the several others, that voting group is put together, that local controversy resolved into an agreed plan.

What we are ready to talk about with this committee now is, we will down size the total project, turn back a massive amount of authorization in return for a smaller concurrent authorization, so deauthorization and reauthorization, if you will, or newly authorize in the same paragraph, to complete this project, much of which as already been finished.

Several of the dams are finished, and a number of the flood plain projects are in place.

This would be the final requirement to finish off this project and at a cost of some 6 million, it is estimated over the construction time, if compared to only on the information we are submitting 21 million, compared to the 120 million that was originally going to be the cost of the project.

So, in the result of all of these goodwill citizens getting together, Mr. Chairman, John Myers for years has been interested in our work, our problems, and we think we are presenting to the committee now a solution, locally agreed to that it is certainly cost-beneficial and indeed an absolute reduction in what the Federal costs would have been had this matter proceeded otherwise, so we are most pleased.

Virginia Smith has well introduced the members. I want to do it in a way that is appropriate and protocol. Bernie Simon, an elected member of the Omaha City Council, to proceed first, and followed by Jim Suttle, by the Omaha Public Works Director, he has been a real key in helping us work out our problems, and to note that Mr. Fricke and Mr. Hoier have been involved in this from the beginning; they are good friends and have had points of view that have coalesced in this agreement.

And each one is elected and serves on the Natural Resources District, so they are sent to this assignment by people, by election, not by appointment.

I am very proud to be associated with them in this opportunity to testify before your committee.

Mr. SIMON. For the record, my name is Bernie Simon, and I am a Councilman of the City of Omaha, and when Congressman Daub formed this ad hoc committee, the PAPIO Watershed Coordinating Committee, he came to the Omaha City Council and said, we want an active member on this Board, and I was President of the Council at that time, and I appointed myself to this very important committee.

This had been in controversy for in excess of 20 years, dams versus no dams, bass fishermen and all the other various special interest groups, and we worked very, very closely with the Corps of Engineers to see if we couldn't arrive at a consensus, and knowing full well that originally, we probably couldn't even hardly stand beside each other, let alone hope that we could ever arrive at a vote.

The reevaluation plan was unanimously accepted by the PAPIO Watershed Coordinating Committee, and this is made up of the three countries, one metropolitan class city, and well, it is a well-represented group.

We came up with a unanimous vote on this compromise, not that any of us really were that wild about the compromise, but it was a good one, we all wanted a little bit more.

Mr. BEVILL. I would think that you had some pretty lively discussions before that.

Mr. SIMON. Most interesting.

Mr. **BEVILL**. We have a little of that here, you know.

Mr. **SIMON**. Mel Hoier, who will testify in a little bit, I am not too sure that Mel wanted to talk to me for a couple of years, and only recently have we been on good talking terms.

The reevaluation is complete, and agreed upon, and what we are talking about is substitute channelization in lieu of dams, it will work, and we are convinced of it. We have taken all the Corps' data ourselves.

We are asking for $7 million in Federal funding to replace the $121 million previously authorized. This will do the job for us, and the City of Omaha endorses and supports the compromises in this plan.

We can live with the compromise. I will turn it over to Mr. Jim Suttle.

Mr. **SUTTLE**. Bernie has summarized the current situation very, very well. You are going to be receiving several handouts, probably most key of all the handouts is this particular piece of paper on top, and in the words of Ed McMahon, as he would say to Johnny Carson, "Everything you want to know", about the people, the issue before you is in this little black box on the top sheet of this particular handout.

I would emphasize one other observation that I had through this entire process, being now with the City of Omaha for four and a half years.

We have had an excellent opportunity here for the rural interests and for the urban interests in the Second Congressional District, to sit down and solve common problems together, and this has been the first of several things that we have been doing.

As an engineer, I am very much interested in seeing projects brought to completion, and our goal, our desire is to settle on the funding, get on with the design, and get on with the implementation, and we appreciate your interest and your support, and your taking under advisement the desires and wishes that we are bringing to you today.

So, thank you.

[The information follows:]

#B

2-8-86
REV. 4-1-86

PAPILLION (PAPIO) CREEK AND TRIBUTARIES LAKES
SARPY, DOUGLAS, AND WASHINGTON COUNTIES, NEBRASKA

- ORIGINAL AUTHORIZATION (1968) — $26.8 million (1967 dollars)
    - Flood Control Act of 1968 (Public Law 90-483)
    - 21 flood control dams

- RECOMMENDED MODIFIED AUTHORIZATION (1975) — $54.7 million (1971 dollars)
    - Dam 3A, in lieu of Dams 1 through 9
    - Dams 10 and 11 to be completed
    - Re-evaluate 8 West Papillion Creek dams

- RE-EVALUATION (1979)
    - Dams 12, 13, 14, 19, and 21 reclassified as inactive

- CONSTRUCTION STATUS

	Federal	Local	Total
Dam 16 - Standing Bear Lake	$ 4.4	--	$ 4.4
Dam 11 - Glenn Cunningham Lake	11.7	--	11.7
Dam 20 - (under construction)	12.0	--	12.0
Dam 18 - (under construction)	17.3	--	17.3
Dam 17 - Lake Candlewood	--	$0.8	0.8
TOTALS	$45.4	$0.8	$46.2

- REMAINING AUTHORIZATION — $120 million (1985 dollars)* (100% federal)

- RE-EVALUATION (1985)
    - Corps study of Dam 3A vs. Dams 1, 2, and 3 vs. only channelizations (Attached)
    - Papio Watershed Coordinating Committee recommendation (Attached)

- Substitute channelization ("L" Street to West Center Road) in lieu of additional dams.
- Seek 100% federal funding for total costs for channelization (est. $7.0m**) by giving up $120m* (100% federal authorization) for dams.

---

* Equates to remaining authorization of $21.43m in 1971 dollars.

** In 1985 dollars, includes connecting road. Original 1984 dollar estimate was $6.2m.

Papio Natural Resources District
3015 Menke Circle
Omaha, NE 68134

Attn: General Manager

City of Omaha
1819 Farnam Street
Omaha, NE 68183

Attn: Public Works Director

Resolution of
PAPIO WATERSHED COORDINATING COMMITTEE

Regarding the recent study conducted by the Corps of Engineers on flood control in the Papio Basin, the City of Omaha supports the following:

1. Modification of UPRR bridge, including a connecting street from "F" Street north to "C" - "D" Street frontage road in order to access the baseball diamonds and other recreation facilities along the channel.

2. 50-year channel from "L" Street to West Center Road.

3. Full land acquisition and full relocation costs for private and public properties impacted by channel improvements. Land acquisition to include full replacement cost of swimming pool complex and construction of recreation facilities (bikeways, etc.) along the channel.

4. 100% Federal funding of all improvements and modifications.

5. Majority support by the PWCC and initiative in securing this 100% Federal funding.

6. City to continue current flood plain management program regarding development in the floodway and the flood plain.

7. Papio NRD to assume all maintenance responsibilities after the channel work. ~~is done from "L" Street to West Center Road~~.

100% Federal Funding Need:

CORPS Estimate	$5,535,200	
Connecting Street	650,000	
TOTAL	$6,185,200	(1984 dollars)

Properties in Acquisition and Relocation

Swimming Pool
Small Restaurant
Insurance Agency
7-11 Store
Auto Repair
Construction Equipment Building
Body Company

3015 MENKE CIRCLE OMAHA, NEBRASKA 68134-4699 (402) 444-6222
PAPIO NATURAL RESOURCES DISTRICT

January 15, 1985

Col. William G. Andrews, Dist. Engineer
Omaha District, Corps of Engineers
6012 U.S. Post Office and Courthouse
Omaha, NE 68102

Re: Papillion Creek and Tributaries Lakes, Nebraska

Dear Col. Andrews:

This is to advise you of the Papio Natural Resources District's intent to act as the local sponsor for a channel improvement project to provide maximum level of protection on the Big Papillion Creek from "L" Street to West Center Road and to meet the local requirements as authorized and required by Congress.

Very truly yours,

Gayle Malmquist
Chairman, Papio Natural Resources
Board of Directors

JRW/pt

City of Omaha
Office of the Mayor

Omaha-Douglas Civic Center
1819 Farnam Street
Omaha, Nebraska 68183
(402) 444-5000

Michael Boyle
Mayor

January 8, 1985

Board of Directors
Papio Natural Resources District
3015 Menke Circle
Omaha, NE 68134

Attention: Jerry Wehrspann
General Manager

Re: Papio Channel Improvements ("L" - West Center Road)

Ladies and Gentlemen:

On December 8, 1984, the Papio Watershed Coordinating Committee, on a consensus vote adopted a resolution to support channel improvements from "L" Street to West Center Road in lieu of additional dams for flood control along the Papio Watershed. Part of that consensus resolution was that the Papio Natural Resources District (NRD) serve as the local sponsor.

In support of the Papio NRD serving as the local sponsor, please be advised that the City of Omaha will:

1. Actively and aggressively assist the Papio NRD in securing project approval and project funding.
2. Accept as a dedicated street, the connecting street proposed from "F" Street north to the "C" - "D" Street frontage road along I-80, thereby assuming all future maintenance responsibilities.
3. Accept any storm sewers that might be constructed as part of the Papio channelization.
4. Discuss with the Papio NRD the terms of City responsibility for any recreation items that may be incorporated into the Papio channelization project.

A lot of time and energy has been expended in reaching this decision on the Papio channelization from "L" Street to West Center Road. The City looks forward to working with the Papio NRD toward the implementation of the recommended solution. The primary contacts for the City in assisting the Papio NRD will be Council President Bernie Simon and my Public Works Director James Suttle.

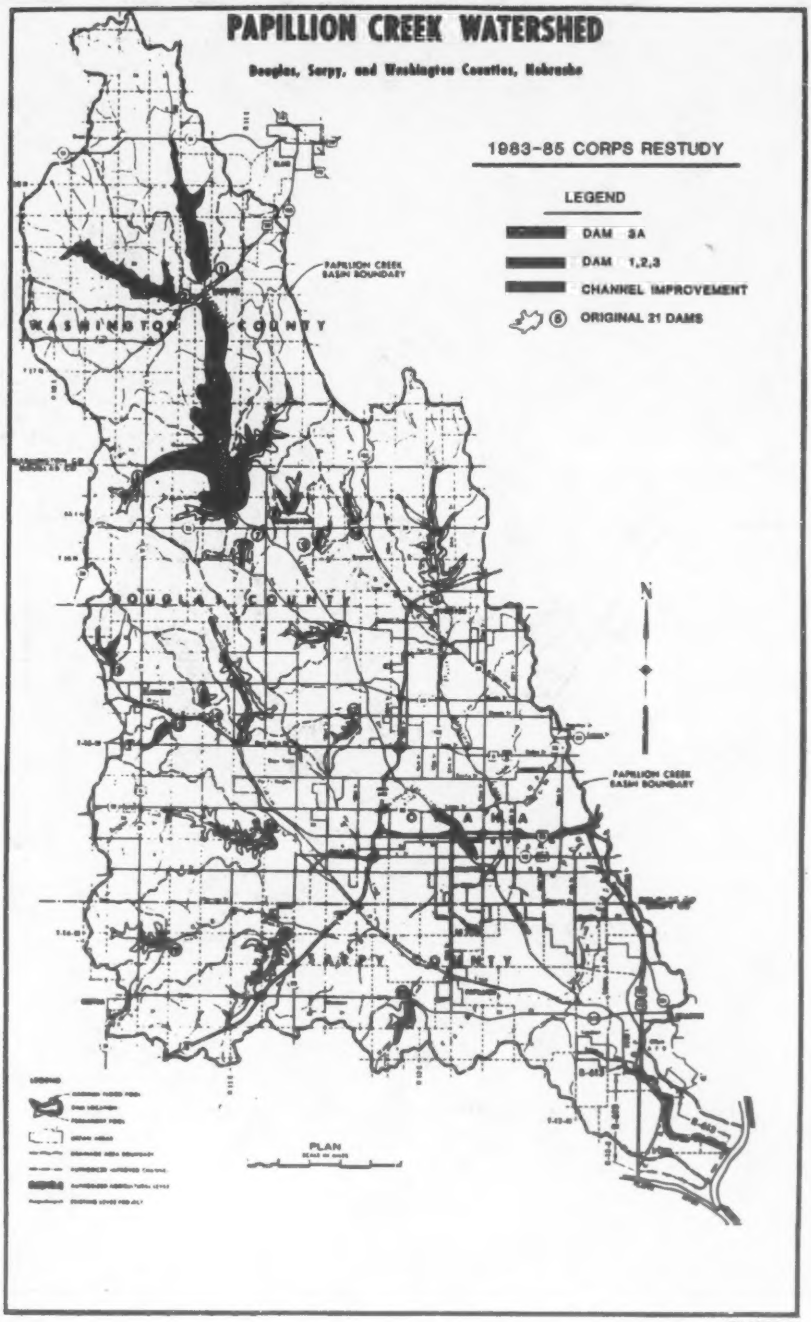
Sincerely yours,

Michael Boyle

Michael Boyle, Mayor
City of Omaha

MB:JHS:tlp

cc: Bernie Simon, City Council President
James Suttle, Director of Public Works ✓
Martin Shukert, Director of Planning
Robert Astleford, Director of Parks, Recreation and Public Property



PAPILLION CREEK WATERSHED

Douglas, Sarpy, and Washington Counties, Nebraska

1983-85 CORPS RESTUDY

LEGEND
DAM 3A
DAM 1,2,3
CHANNEL IMPROVEMENT
⑥ ORIGINAL 21 DAMS
PAPILLION CREEK BASIN BOUNDARY
WASHINGTON COUNTY
DOUGLAS COUNTY
OMAHA
SARPY COUNTY
N
PLAN

PLATE W

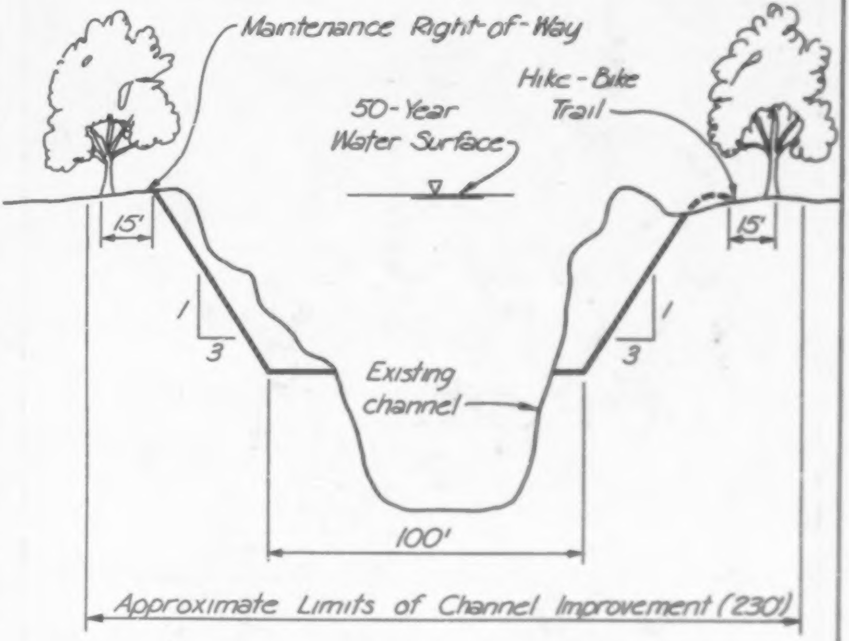

Maintenance Right-of-Way
Hike - Bike Trail
50-Year Water Surface
15'
15'
1
3
1
3
Existing channel
100'
Approximate Limits of Channel Improvement (230')

FIGURE I. TYPICAL SECTION OF 50-YEAR CHANNEL IMPROVEMENT

PAPILLION VALLEY PRESERVATION ASSOCIATION, INC.

STATEMENT BY

PAPILLION VALLEY PRESERVATION ASSOCIATION, INC.

BEFORE

ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
COMMITTEE ON APPROPRIATIONS, HOUSE OF REPRESENTATIVES
CONGRESSMAN TOM BEVILL, CHAIRMAN

ON

PAPILLION CREEK AND TRIBUTARIES FLOOD CONTROL PROJECT

Written Testimony

By Mel Holer, Chairman

April 14, 1986

APPROPRIATION HEARINGS

HONORABLE TOM BEVILL, CHAIRMAN
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APPROPRIATION COMMITTEE
RAYBURN HOUSE OFFICE BUILDING - Room 2362
WASHINGTON, D.C. 20515

SUBJECT: Papillion Creek Flood Control Project

The Papillion Valley Preservation Ass'n support the resolution that was adopted by Hal Daub's Papio Watershed Coordinating Committee. This resolution pertains to channel improvement from "L" Street to West Center Road in Omaha, Nebraska, in lieu of additional dams for flood control along the Papio Watershed.

We feel that this plan would provide almost complete protection for that area of Omaha where the majority of damage would occur and also provide some recreation at a small fraction of the original cost.

We urge your approval and funding for the Papio Watershed Coordinating Committee Resolution, a copy of which is attached.

Respectfully submitted,

PAPILLION VALLEY PRESERVATION ASS'N

BY Mel Hoin
Chairman

Attach.
RE: Resolution

Resolution of
PAPIO WATERSHED COORDINATING COMMITTEE

Regarding the recent study conducted by the Corps of Engineers on flood control in the Papio Basin, the City of Omaha supports the following:

1. Modification of UPRR bridge, including a connecting street from "F" Street north to "C" - "D" Street frontage road in order to access the baseball diamonds and other recreation facilities along the channel.

2. 50-year channel from "L" Street to West Center Road.

3. Full land acquisition and full relocation costs for private and public properties impacted by channel improvements. Land acquisition to include full replacement cost of swimming pool complex and construction of recreation facilities (bikeways, etc.) along the channel.

4. 100% Federal funding of all improvements and modifications.

5. Majority support by the PWCC and initiative in securing this 100% Federal funding.

6. City to continue current flood plain management program regarding development in the floodway and the flood plain.

7. Papio NRD to assume all maintenance responsibilities after the channel work, ~~is done from "L" Street to West Center Road~~.

100% Federal Funding Need:

CORPS Estimate	$5,535,200
Connecting Street	650,000
TOTAL	$6,185,200 (1984 dollars)

Properties in Acquisition and Relocation

Swimming Pool
Small Restaurant
Insurance Agency
7-11 Store
Auto Repair
Construction Equipment Building
Body Company

STATEMENT BY

PAPIO NATURAL RESOURCES DISTRICT

TO

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

COMMITTEE ON APPROPRIATIONS, HOUSE OF REPRESENTATIVES

CONGRESSMAN THOMAS BEVILL, CHAIRMAN

ON

PAPILLION CREEK AND TRIBUTARIES FLOOD CONTROL PROJECT

April 16, 1986

The Papio Natural Resources District wishes to take this opportunity to request continued support for flood control activities related to the Papillion Creek and Tributaries flood control project. This project is of vital interest and concern to the District. The Papillion Creek and Tributaries project has been discussed many times with your Committee and we will not review historical items which you have in your files. We appreciate your previous support for the project and ask for your continued support of Federal involvement in this needed project.

The Administration's Fiscal Year 1987 proposed budget requests funding for continuation of the Papillion Creek and Tributaries project. It is our understanding that these funds would be used for work on Sites 18 and 20 in the Papillion Creek watershed. Funds would be used for completion of the revegetation at both sites, initiation of construction of recreation facilities at Site 18, continuation of recreation facilities construction at Site 20 and other items. We urge your continued support for this project by funding this proposed budget request.

Appropriations for a restudy of the flood control needs in the Papillion Creek basin were authorized by this Committee in 1982. That restudy is now completed and is in the very final stages of approval by the Office of the Chief of Engineers. The restudy report passed review by the Board of Engineers for Rivers and Harbors and is proposed for approval by the Chief of Engineers following state review which ends the 11th of May. The modified plan recommended in the re-evaluation report yielded overwhelming local support for what has in the past been a very controversial project.

The Papio Watershed Coordinating Committee, of which the Papio NRD was a member, was formed following the 1982 authorization. It consisted of representatives from eleven governmental agencies and interested organizations and worked very hard and long with the Corps in coming up with this modified flood control plan. The modified project adopted by the Committee, with no decenting votes consists of:

1. A 50 year channel improvement along the Big Papillion Creek generally extending from West Center Road to L Street in Omaha, Nebraska.

2. Improvement of the Union Pacific Railroad bridge crossing Big Papillion Creek located upstream of F Street, including a connecting street from F Street north to the C-D Street frontage road to access the recreation facilities along the channel.

3. A two mile recreation trail extending the length of the recommended channel improvement.

4. An electronic flood warning system for the entire Papillion Creek basin system.

The District hereby requests that this Committee direct the Corps of Engineers to proceed with construction in accordance with the plan contained in the re-evaluation report for Papillion Creek and Tributaries Lakes, Nebraska, March 1985 (revised October, 1985) and that funds in the amount of $400,000 be added to the Administration's proposed Fiscal Year 1987 budget for continuing construction of this plan.

The Papio NRD further requests that future appropriations finance 100% of the entire project including design, administration, land acquisition, relocations and construction. The total cost for this modified project is estimated at $7.0 million which includes $600,000 for relocation of a connecting street to recreation facilities.

In summary, we would like to thank you for your past support for this project and urge your continued support by funding the Administration's request as well as providing $400,000 for continuing consturction of the modified flood control project for the Papillion Creek and Tributaries Lakes, Nebraska, in Fiscal Year 1987.

Board Of Commissioners **Douglas County, Nebraska**

STEVE ROSENBLATT
WILLIAM GREEN

STEPHEN J. McCOLLISTER
MICHAEL A. KELLEY

MICHAEL L. ALBERT, CHAIRMAN
Richard Schoettger, Chief Administrative Officer
Omaha-Douglas Civic Center – Omaha, Nebraska 68183
402 444-7025

April 15, 1986

The Honorable Tom Bevell, Chairman
Subcommittee on Energy and Water Development
Appropriation Committee
Rayburn House Office Building
Room 2362
Washington, D.C. 20515

RE: Papillion Creek Flood
Control Project

Dear Sirs:

We want to express our support for the resolution that was accepted and approved by the Papio Watershed Coordinating Committee.

We also endorse de authorization of the remaining dams in the authorized project.

Best regards,

Michael L. Albert

Michael L. Albert, Chairman
Board of County Commissioners

VILLAGE OF BENNINGTON
BENNINGTON, NEBRASKA

April 14, 1986

The Honorable Tom Bevell, Chairman
Subcommittee on Energy and Water Development
Appropriation Committee
Rayburn House Office Building
Room 2362
Washington, D. C. 20515

Subject: Papillion Creek Flood Control Project

Dear Sirs:

Our community is located within the Papillion Creek basin. We support the P. W. C. C. plan, channel improvement, channel levees and modification of the Union Pacific railroad bridge.

We also endorse de authorization of the remaining dams in the authorized project.

Sincerely,

William Bohn

William Bohn
Chairman of the Board
Board of Trustees
Village of Bennington

City of Blair
Mayor M. Stanley Jensen
218 South 16th
Blair, Nebraska 68008
402-426-4191

Blair . . . A promise of quality..

April 10, 1986

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
Appropriation Committee
Rayburn House Office Building
Room 2362
Washington, D. C. 20515

Subject: Papillion Creek Flood Control Project

Honorable Tom Bevill:

In 1981, Congressman Hal Daub formed an ad hoc committee of people representing the three counties in the Papillion Creek Watershed. We have followed this controversy since the beginning and want to state that we support the resolution that this committee (Papio Watershed Coordinating Committee) has accepted and approved for channel improvement in the City of Omaha, Nebraska.

This resolution pertains to a "50" year channel from L Street to West Center Road on the "Big Papio Creek", modification of UPRR bridge, streets and roads for access to recreational facilities along the channel, full land acquisition and relocation costs of public properties, the City of Omaha to continue flood plain management regarding development in floodway and flood plain and for the Papio NRD to assume all maintenance responsibility after the channel work is done.

The Corps of Engineers estimated cost of this improvement is $6,185,200.00. When you consider this figure against the figure of $50,000,000.00 plus - the Corps figures for Dam 3A, another plan that was considered by this committee, that gave little protection to the city because of its distance from the vulnerable area.

We hope that you will support the resolution and we thank you for your time in considering this letter.

Sincerely,

M. Stanley Jensen

M. Stanley Jensen
Mayor

City of Elkhorn

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
Appropriation Committee
Rayburn House Office Building
Room 2362
Washington, D.C. 20515

Subject: Papillion Creek Flood Control Project, Omaha, NE.

Honorable Tom Bevill

We have followed the Papillion Creek Watershed plan for some years. We want to express our support for the resolution that was accepted and approved by Congressman Hal Daub's Papio Watershed Coordinating Committee for channel improvement in Omaha, Nebraska from L street to West Center Road on the Big Papillion Creek.

This resolution pertains to Modification of UPRR bridge, streets and roads for access to the recreational facilities along the channel, a 50 year channel from L street to West Center Road, full land accuisition and relocation costs of public properties, the City of Omaha to continue current flood plain management program regarding development in the floodway and the flood plain and for the Papio NRD to assume all maintenance responsibilities after the channel work is done.

We urge the Appropriation Committee to approve this resolution so this problem can be solved.

Respectfully submitted

Gary Bridges
Mayor
Gary Bridges
City of Elkhorn

P.O. BOX 386 • 401 GLENN ST. • ELKHORN, NEBRASKA 68022 • PHONE (402) 289-2678

Washington, Nebraska
April 10, 1986

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
Appropriation Committee
Rayburn House Office Building, Room 2362
Washington, D.C. 20515

Subject: Papillion Creek Flood Control Project

Dear Mr. Bevill:

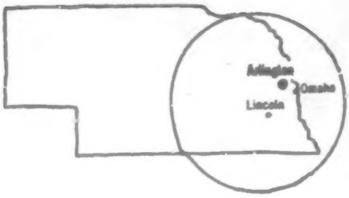
As a board member of the Papillion Valley Preservation Association, and a member of Congressman Hal Daub's Coordinating Committee, we finally came up with a plan that is a much better and cheaper solution to the flood problems on the Big Papio Creek flowing through Omaha, Nebraska. The plan has been agreed to by all entities involved including the Corps of Engineers in Omaha and Washington, D.C.

We in Washington, Nebraska, support the resolution of Congressman Hal Daub's Coordinating Committee, and ask that the project be federally funded with work started as soon as possible.

Respectfully,

Eric L. Knudsen, Mayor
Washington, Nebraska

VILLAGE OF ARLINGTON
BOARD OF TRUSTEES
ARLINGTON, NEBRASKA



April 10, 1986

The Honorable Tom Bevill, Chairman
Subcommittee on Engery and Water Development
Appropriation Committee
Rayburn House Office Building
Room 2362
Washington, D.C. 20515

Subject: Papillion Creek Flood Control Project

Honorable Tom Bevill:

I hereby support the resolution that was unanimously accepted and approved by Congressman Hal Daub's Papio Watershed Coordinating Committee for channel improvements of the " Big Papio Creek" from L street to West Center Road in Omaha,Nebraska.

This resolution pertains to modification of the U.P.R.R. bridge, streets and roads for access to recreational facilities along the channel, 50 year channel from L street to West Center Road, full land acquisition and relocation costs of public properties, the City of Omaha to continue flood plain management regarding development in floodway and flood plain and for the Papio NRD to assume all maintenance responsibility after the channel work is done.

The estimated cost of this improvement project is $ 6,185,200- Corps of Engineer figures.

I urge the approval of this resolution because of the benefits for the City of Omaha using channel improvments as opposed to dams above the city which are much more costly and do not give protection from a storm cell below the structures.

Respectfully,

Wayne Royuk
Wayne Royuk,
Mayor

Village Of Kennard
— Box 151 —
208 Main Kennard, Nebraska 68034 Phone 427-7313

April 10, 1986

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
Appropriation Committee
Rayburn House Office Building
Room 2362
Washington, D.C. 20515

Subject: Papillion Creek Flood Control Project

Honorable Tom Bevill:

We have been involved with the controversy concerning the difference of opinion for flood control on the Papillion Creek Project since the beginning. We had high hopes when Congressman Hal Daub formed an ad hoc committee from the three counties involved.

We urge your approval of the resolution that was accepted and approved by the Papio Watershed coordinating Committee for channel improvement of the "Big Papio Creek" in Omaha, Nebraska, from "L" Street to West Center Road.

This resolution consists of a 50-year channel from "L" Street to West Center Road, modification of UPRR bridge, with roads so there will be an access to recreational facilities along the channel, full land acquisition and relocation costs of public properties, the City to continue current flood plain management regarding development in the floodway and the flood plain, and for the Papio NRD to assume all maintenance responsibility after the channel work is done.

The Corps of Engineers' estimated cost for this is $6,185,200.00.

We urge the approval of this resolution as it has been agreed to by the members of Congressman Daub's Papio Watershed Coordinating Committee, and it is the best solution for the flooding problem in the City of Omaha.

Respectfully,

Lloyd A. Todd
Mayor

CHARLOTTE L. PETERSON
COUNTY CLERK
BEVERLY WARREN
DEPUTY

WASHINGTON COUNTY
Office of County Clerk
COURTHOUSE
Phone 426-2333
Blair, Nebraska 68008

COUNTY SUPERVISORS
[illegible]

April 8, 1986

Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
Appropriation Committee
Rayburn House Office Building Room 2362
Washington, D.C. 20515

Subject: Papillion Creek Flood Control Project

Honorable Tom Bevill:

Recently a resolution was approved by Congressman Hal Daub's Papio Watershed Coordinating Committee for channel improvement of the portion of Big Papillion Creek located within the city of Omaha, Nebraska from L street to West Center Road. The Washington County Board of Supervisors wishes to go on record in support of this resolution.

Furthermore, the Washington County Board urges 100% Federal Funding in the amount of $6,185,200-Corps of Engineer Estimate, for the following items needed to accomplish the channel improvement: modification of UPPR bridge, with a connecting street to access recreation facilities adjacent to channel; 50 year channel from "L" Street to West Center Road; full land acquisition and full relocation costs for private and public properties impacted by channel improvements.

The Washington County Board, as well as the City of Omaha also support the following: city to continue current flood plain management program regarding flood plain development and Papio Natural Resources District to assume all maintenance responsibilites after channel work.

Because of the benefits of channel improvements for the City of Omaha as opposed to dams above the city which are much more costly and less effective, the Washington County Board urges immediate approval of Federal Funding for this project.

Sincerely,

Jim Knag

Jim Knag, Chairman
Washington County Board of Supervisors

JK/cjk

Mr. Hoier. I am Mel Hoier, I am the Chairman of the PAPIO Valley Preservation Association. Not much more needs to be said. These gentlemen have covered all bases.

We do agree. It was our privilege to be on Congressman Daub's ad hoc committee, and we are hoping that you can see the way to help balance the budget and save a bunch of money, fund this as quick as you can, so that we can get deauthorization for the balance of the project.

Mr. Fricke. I am Milton Fricke, Sarpy County Representative, and our statement is before you, and has been turned in. There are a couple of points in here that have not been talked about.

We still have two dams that need to be finished, 19 and 20, and we are asking for some money to continue finishing them up, along with the other money that we have.

Hal made one statement that you probably should have heard a long time ago, a little small stream, any place else in the United States, Papillion Creek would be a river.

A lot of our dry areas just wish they had that much water running through them. Maybe we would have had better luck if a long time ago, we had said that this is a river instead of a creek.

Mr. Bevill. We appreciate the fine job you all have done.

Mr. Daub. We appreciate this, Mr. Chairman. We look at the opportunity now to move it off of what has been a very difficult time for the committee. We appreciate Mrs. Smith's work in particular, and we appreciate the staff's help.

The drafting of the deauthorization and the authorization will require expertise that I do not possess, and we will look to the committee for help, and hope that the point of full funding is heeded. Such full funding is much like the Upper Mississippi Valley compromise you entered into a year ago.

The Corps of Engineers report, I should say, is to be fully, I think it is under its final 90 days, which expires May 11, we expect no controversy, which means it is an eligible project, and a lot depends on timing, and I will do all I can to accommodate you as well in any request you make of me.

Mrs. Smith. We certainly appreciate all of you being here. I am delighted to know about the agreement, and we will do everything in our power to help.

Mr. Chairman, while we are waiting for Mr. Williamson to come up, I would like to ask Mrs. Earl Lincoln to stand up. She is here for the DAR Congress, but she came out to say to us, please hurry up and get that water in the project, because they need it out there.

WEDNESDAY, APRIL 16, 1986.

NEBRASKA PROJECTS

WITNESS

DAYLE E. WILLIAMSON, DIRECTOR, NEBRASKA NATURAL RESOURCES COMMISSION

Mrs. SMITH. Dayle Williamson is the personal Representative of the Governor, the Director of our Natural Resources program; and he is here to talk about the O'Neill Unit and any other water projects in Nebraska.

Mr. WILLIAMSON. Mr. Chairman, members of the committee, it is certainly a pleasure to appear before you today. I am Dayle Williamson, as Mrs. Smith pointed out, Director of Natural Resources for Nebraska, and I filed a letter from our Governor on some other issues, the North Loup Division and so on, and also a letter from our Director of Water Resources, Mike Jess, and a letter from our Natural Resources Committee, supporting these activities.

Mr. Larry Moore is with me today. He filed a letter on behalf of the Commission.

There are five points I would like to make. We strongly support the continued construction funding and cost ceiling increases for the North Loup Division.

Number two, we support planning funds for the O'Neill Unit.

Number three, we support completion of the Platte River Joint Management Study.

Number four, we support continued funding for the Prairie Bend Unit Feasibility Study; and number five, initiation of a Loup Basin Study.

First, let me express our strong support for the continued funding of the North Loup project. This partially completed project is nearing its initially established cost ceiling. The Bureau of Reclamation has informed us that additional contracts cannot be negotiated until the ceiling is raised.

While the cost increase required is of considerable magnitude, it would be most unfortunate to terminate construction on a project less than half complete.

Our understanding is that many of the extra costs will be incurred in a quest for safety, and we urge completion of the project.

Next, the O'Neill Unit. We are very sorry Mr. Drayton couldn't be here, but it is an honor for me to represent them. They have done an outstanding job in our State.

I have appeared before this subcommittee on many occasions since project authorization in 1972. Each time I have voiced continued State support for the project. We finally came to realize the project would never become a reality with the Norden Dam as a component.

With Congressional urging, a State-led alternatives study demonstrated the viability of collector system in the river valley to provide water for ground water recharge.

Considerable additional effort will now be required by the Bureau of Reclamation to "flesh out" the recharge concept to insure a manageable and feasible project. The State of Nebraska is making preparations to assist the Bureau with this final planning study to determine the future of the project. We support the $1.4 million appropriation proposed by the Administration for that effort.

Our third area of support is directed to the Bureau of Reclamation and the U.S. Fish and Wildlife, Platte River Joint Management Study. The States of Colorado, Wyoming and Nebraska are also providing input. We understand the Bureau does not require additional fiscal year 1987 funding to complete this activity.

We fully recognize that water development projects are at a standstill until a full resolution of habitat needs is accomplished.

Fortunately, activity on this issue has been elevated considerably this past year, and progress is being made toward conflict resolution. Nebraska State government has pledged its assistance and will contribute toward completing this effort in 1987.

The fourth item is the Prairie Bend Unit feasibility study. This proposed irrigation project will be far from typical. Before water can be used for irrigation, wildlife habitat needs will have to be quantified and provided for.

This proposed multipurpose project may also employ new concepts in ground water recharge. There is a close relationship between this study and the Platte River Joint Management Study, and both will contribute to a better understanding of the critical habitat needs of the Platte.

The study effort is intensive at present, and the Bureau indicates a need for $400,000 for fiscal year 1987. We support that request. Considerable local cost-sharing has been provided for this study.

Finally, Nebraska would like to initiate a Loup Basin study in cooperation with the Bureau of Reclamation. The need for the study stems from tremendous irrigation development pressure in our Nebraska Sandhills in the 1970s.

While that pressure is greatly relaxed at present because of the poor agricultural economy, there is a critical need to carefully evaluate the resources and prepare a management plan for the future.

For the past several years, the State has provided funding to gather information in the area and we now believe a collective effort between the Bureau and the State will be very beneficial.

The Bureau received a $100,000 write-in for the proposed study in fiscal year 1986, and we support continuation of funding to complete the study over a four-year period. We anticipate the total effort will take $1.5 million.

The State of Nebraska is making preparations to cost-share and provide in-kind services for up to one-half of that amount.

I thank you for the opportunity to appear before your subcommittee and I urge your consideration of our request.

[The information follows:]

#C R

STATE OF NEBRASKA
ROBERT KERREY • GOVERNOR

April 11, 1986

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2302 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Bevill:

This letter is to express my continued support for the Bureau of Reclamation's fiscal year 1987 funding request of $14,035,000.00 for the continued construction of the North Loup Division.

The North Loup Division will provide sustained irrigation for 53,000 acres in Central Nebraska, as well as increased recreation and fish and wildlife enhancement opportunities.

The Nebraska Game and Parks Commission entered into a cost-sharing agreement under Public Law 89-72 for the construction of recreation facilities at the Calamus Dam and Reservoir. The Agreement calls for 50% Federal and 50% State funding. However, Nebraska has provided $540,000 through appropriations from our General Fund and $528,000 from our Recreation Roads Fund, a special use fund financed by a fee on motor vehicle registrations. The Federal contribution will be $570,000.

The Game and Parks Commission will also operate and maintain the recreation facilities. The fiscal year 1987 state appropriation includes $117,000 of general funds for this purpose.

The Game and Parks Commission has also stocked 2,800,000 fish in Calamus Dam and Reservoir since the early stages of filling.

While Nebraska's revenues are falling below projected levels and we are severely limiting new commitments, the Game and Parks Commission has made a serious commitment to fulfill its intention to make Calamus Dam and Reservoir recreation facilities a reality.

The Game and Parks Commission has executed a similar Cost Sharing Agreement for the initial fish stocking and the construction of a Fish Hatchery below the Calamus Dam and Reservoir. The consummation of this Agreement is contingent upon an increase to the authorized project ceiling and appropriations.

I urge the Subcommittee's continued support for an appropriation of $14,035,000.00 for Fiscal Year 1987 and to provide appropriate authorization to complete the construction of the North Loup Division.

Sincerely,

Robert Kerrey
Governor

STATE OF NEBRASKA
ROBERT KERREY • GOVERNOR • J. MICHAEL JESS • DIRECTOR

April 11, 1986

IN REPLY REFER TO:

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Bevill:

The Nebraska Department of Water Resources has worked closely with the Twin Loups Reclamation District since its first water rights application was filed on June 17, 1957. Construction of the North Loup Division is now well over half completed. Storage in the Calamus Reservoir began in October, 1985.

I look forward to working with both the Twin Loups Reclamation District and the Twin Loups Irrigation District during the initial irrigation development of the 53,000 acres in their project.

Please note my support for the Fiscal Year 1987 construction request. I wish also to urge your Subcommittee to authorize appropriations to complete the construction of the North Loup Division.

Sincerely,

DEPARTMENT OF WATER RESOURCES

Michael Jess

J. Michael Jess
Director

JMJ:ch
cc: C. P. Shaughnessy

DEPARTMENT OF WATER RESOURCES, BOX 94676, LINCOLN, NEBRASKA 68509-4676, PHONE (402) 471-2363
AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER M/F/H

STATE OF NEBRASKA
NATURAL RESOURCES COMMISSION
301 CENTENNIAL MALL SOUTH • P.O. BOX 94876 • LINCOLN, NEBRASKA 68509-4876 • PHONE (402)471-2081

April 11, 1986

The Honorable Tom Bevill Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Bevill:

The Nebraska Natural Resources Commission again wishes to reaffirm its strong support for the continued construction of the North Loup Division, Pick-Sloan Missouri Basin Program in Central Nebraska. The Commission has steadfastly supported this Project since the early days of planning.

Accordingly, we urge support of the Fiscal Year 1987 Budget Request for $14,035,000.00 and thank the Subcommittee for your past support of this Project. We also urge your Committee to authorize appropriations to complete the construction of the North Loup Division.

Sincerely,

FOR THE NATURAL RESOURCES COMMISSION

Dayle E. Williamson

Dayle E. Williamson

DEW:cl

Mrs. SMITH. Thank you very, very much for making the big trip back here. Thank you, Dayle.

WEDNESDAY, APRIL 16, 1986.

MISSOURI NATIONAL RECREATION RIVER

WITNESSES

DARREL G. CURRY, VICE PRESIDENT, MISSOURI RIVER BANK STABILIZATION ASSOCIATION

ART VOLK, MISSOURI RIVER BANK STABILIZATION ASSOCIATION

Mrs. SMITH. Now, we turn to another good friend, Mr. Darrel Curry, Vice President of the Missouri River Bank Stabilization Association, and he is going to testify about the progress or maybe about the lack of progress on our Missouri recreation project up in northeast Nebraska.

Mr. CURRY. Art Volk will give our testimony.

Mr. BEVILL. You may proceed.

Mr. VOLK. On behalf of the membership of the Missouri River Bank Stabilization Association, we want to thank you for the opportunity to testify with reference to the fiscal year 1987 budget.

We truly appreciate this opportunity, and we want to thank you for the kindness and consideration shown us previously. We have testified before you on numerous occasions since 1973.

The funding you have favored us with in the past has done much to limit the depredations of the Missouri as well as to aid in the preservation of the natural beauty of this remnant of the river familiar to Lewis and Clark, the fur traders and the steamboat men of the last century.

All too little of the "wild" Missouri remains, and it is fitting indeed that you have seen fit to help preserve one of the remaining wild reaches. We especially wish to thank you for the funding granted us last year. These funds will be most helpful.

We are here to request the Missouri National Recreational Project, authorized in 1978 under section 707 of Public Law 95-625, be included for continued funding this year. When the project was authorized, the sum of $21 million was identified as its cost, that sum to be spent over a period of years.

For fiscal year 1987, $1 million is needed for construction along with $200,000 for operation and maintenance of the works already completed along this reach of the river under the section 32 Streambank Erosion Control and Demonstration Act, which ended in 1983.

This project involved a 59-mile segment of the Missouri lying between the Gavins Point Dam, near Yankton, South Dakota, and the Ponca State Park, near Ponca, Nebraska.

This is the only reach of the Missouri below the Gavins Point Dam which is not channelized or otherwise controlled. It is the sole surviving segment of the Big Muddy below Gavins Point Dam which is in more or less its natural condition.

It is the only wild reach of river in the "old" valley which begins near Yankton, South Dakota. The "old" valley was not subjected to the most recent glaciation, so it is markedly wider than the "new" valley lying upstream of Yankton.

In this, the "old" valley, the Missouri is free to roam in a miles-wide flood plain. Here, it meanders at will. Releases from Gavins Point Dam, which vary considerably, are governed by the need for flood control, navigation, drinking water supplies and hydroelectric power.

These releases continue to ravage the sandy river banks, relentlessly attacking and destroying the river's corridors. This corridor, of course, is that sought to be preserved for future generations so that at least a bit of the "wild" Missouri will survive for them to enjoy.

If funding of this project is continued, it will enable the Corps of Engineers to continue their efforts to contain the river and preserve its character as a natural resource river. This funding would prevent the loss or impairment of the $6 million worth of work which has already been completed and which serves as a base for the work yet required to preserve and protect this unique segment of the river.

We are well aware of the concern for cost sharing by local interests and, in fact, have no quarrel with that philosophy. In reference to the cost sharing, we are pleased to be able to report that local governmental units in both Nebraska and South Dakota have agreed to share in the cost of constructing access facilities to the river, such facilities consisting of launching ramps, parking areas and comfort stations.

With reference to the work needed to contain the river and preserve its character, we believe the expenditures for that portion of the project are properly the responsibility of the Federal Government.

The Congressional designation of the "wild" Missouri as a part of the wild and scenic rivers system was for the purpose of preserving a bit of the river in a more or less natural state.

In this way, Congress sought to preserve for the Nation a historic part of its heritage. Appropriately, then, the Federal Government should bear the cost of that preservation. It should be noted, too, that those projects administered by the Department of Interior are traditionally funded solely by the Federal Government.

Beyond that, the severe erosion problems caused by fluctuating, unpredictable releases of water from the Gavins Point Dam are problems directly attributable to the construction of the Dam by the Federal Government.

Equity and good conscience would seem to require that the Federal Government bear the costs of alleviating the continuing problems. The latter would help stop further deterioration of the work already accomplished.

We do thank you for this opportunity to appear before this committee and for the consideration so readily extended to us and our association of farmers, outdoorsmen, naturalists and environmentalists. It is the members' love for this old river which has brought us to Washington for over a dozen years.

We would be happy to try to answer any questions you might have. Thank you.

[The information follows:]

Nebraska State Legislature
Unicameral
Lincoln, Nebraska 68509

SENATOR ELROY M. HEFNER

District No. 19
Box 36
Coleridge, Nebraska 68727
Home: (402) 283-4476

Legislative Address:
State Capitol
Lincoln, Nebraska 68509
Office: (402) 471-2624

COMMITTEES

Chairman, Miscellaneous Subjects
Vice Chairman, Revenue
Legislative Council

EIGHTY-NINTH LEGISLATURE

HD

April 10, 1986

Chairman
Subcommittee
Energy and Water Development
House Appropriations Committee

Dear Chairman and Subcommittee Members:

Please include this letter in your Committee records as being supportive of the Missouri River Bank Stabilization efforts to obtain funding for the National Recreation River. This "National Recreation River" covers the 50-mile segment of the Missouri River from Gavins Point Dam near Yankton, South Dakota, to Ponca State Park near Ponca, Nebraska.

I would appreciate very much your acceptance of my letter in lieu of an appearance before your Committee, as distance and my involvement with the Nebraska Legislature prohibit my personal testimony at this time.

Sincerely,

Elroy M. Hefner

Elroy M. Hefner
State Senator
District 19

EMH:e

Nebraska State Legislature
Unicameral
Lincoln, Nebraska 68509

SENATOR GERALD A. CONWAY
District No. 17
Home Address:
1115 Lawndale Drive
Wayne, Nebraska 68787
(402) 375-4156
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EIGHTY-NINTH LEGISLATURE

COMMITTEES
Judiciary
Law Enforcement and Justice Advisory
Miscellaneous Subjects
Legislative Council

April 8, 1986

Honorable Jamie L. Whitten
Cannon House Office Building H218
Chairman, House Appropriations Committee
Washington, D.C. 20515

Dear Congressman Whitten:

Please include this letter as part of the committee record for the hearing at which it is presented.

The ongoing conservation efforts of the Missouri River Bank Stabilization Association have my strong support. Through the dedicated efforts of the Association, oversight of a valuable recreational, historical and commercial resource is being maintained. A continuing need for work on the Missouri River has been exhibited by the Association. At the same time, care and respect has been shown for the natural wonder the river represents.

My legislative district in Nebraska borders the Missouri River for approximately 50 miles. On several occasions I have had first-hand opportunity to observe progressive changes in the form and location of banks on both the Nebraska and South Dakota sides of the river. The loss of both public and private property, as well as the deterioration of the area's aesthetics, by erosion is frightful.

The need to stabilize the Missouri River is without question. Flooding, to balance the progressive erosion, has been virtually eliminated by the Missouri River Dam Network. Erosion control has, then, become even more crucial.

Since the Missouri River also serves as a state boundary, progressive changes have brought about a number of legal questions regarding the actual location of borders altered by shifting channels. The settlement of such conflicts must be predicated by the preservation of existing banks - important work which the Missouri River Bank Stabilization Association is committed to accomplishing.

I offer my firm support to the Association's ongoing efforts and the proposals which they have offered.

Sincerely,

Gerald A. Conway

GAC/bk

South Dakota Legislature
State Capitol, 500 East Capitol, Pierre, South Dakota 57501

House Chamber

311 Canby St.
Vermillion, SD 57069

April 6, 1986

Chairman
House Appropriations Committee
U.S. Capitol
Washington, D.C.

Dear Honorable Chairman:

Once again it has come to my attention that the House Appropriations Committee is discussing the funding of the Missouri River as a National Recreational River.

The 59 mile stretch of river that flows through South Dakota from Yankton, South Dakota to Sioux City, Iowa is one of the last natural stretches along the entire river. If this section of the river is ever going to improve, Congress and the Administration must support the funding of this legislation.

There is a great need for bank stabilization and erosion control. It is a total waste of resources when the river bank, crop land and trees fall in the river as well as a safety hazard to boaters and other recreationists who use and enjoy the river. Proper management needs to be made a priority of Congress and this Administration so that the Missouri River can be used and enjoyed by all for many years to come.

Thank you for your kind consideration of the appropriation measure.

Sincerely,

Mary B. Edelen

Rep. Mary B. Edelen
State Representative
Clay & So. Union Counties
South Dakota

1889

Tim Johnson - State Senator

SENATE CHAMBERS
TIM JOHNSON
STATE SENATOR
BOX 272
VERMILLION, SOUTH DAKOTA 57069

APRIL 2, 1986

CHAIRMAN
SUB-COMMITTEE ON ENERGY & WATER DEVELOPMENT
HOUSE APPROPRIATIONS COMMITTEE
WASHINGTON, D.C. 20000

RE: MISSOURI NATIONAL RECREATION RIVER.

MR. CHAIRMAN & COMMITTEE MEMBERS:

As a State Senator from a district which borders on virtually all of the South Dakota portion of the Missouri National Recreation River, I would like to take this opportunity to express my strong support for funding for the Recreational River Project.

Please accept this letter in your committee records as evidence of my support.

SINCERELY,

Tim Johnson

TIM JOHNSON
STATE SENATOR
CLAY-UNION COUNTIES
SOUTH DAKOTA

TJ*lbg

P.O. BOX 272
VERMILLION, SOUTH DAKOTA 57069

HOME 624-9277
WORK 624-2667

Mrs. SMITH. Thank you very much for being here.

Did you have anything to add, Mr. Curry?

Mr. CURRY. No.

Mrs. SMITH. Thank you very, very much.

WEDNESDAY, APRIL 16, 1986.

NEBRASKA PROJECTS

WITNESSES

HENRY G. LANGE, ORD, NEBRASKA, SECRETARY-TREASURER OF THE TWIN LOUPS RECLAMATION DISTRICT

DONALD E. KILDAY, PALMER, NEBRASKA, PRESIDENT OF THE TWIN LOUPS IRRIGATION DISTRICT AND VICE PRESIDENT OF THE TWIN LOUPS RECLAMATION DISTRICT

CYRIL P. SHAUGHNESSY, ST. PAUL, NEBRASKA, ATTORNEY FOR THE TWIN LOUPS RECLAMATION DISTRICTS AND THE TWIN LOUPS IRRIGATION DISTRICT

Mrs. SMITH. Now, for the North Loup Division, currently about 50 percent complete, we have three more of our good long-time friends, Henry Lange, Don Kilday and Cyril Shaughnessy, who will present the next testimony.

The authorizing committee has not yet taken up my bill, 2503, that I put in nearly a year ago, for the 140 extra million dollars that we need, but the folks who are here today are asking that this subcommittee include in the regular appropriation bill for 1987 funds to keep this part of the Pick-Sloan plan moving ahead on standing.

It is my understanding that they have the capability of using $8 million in addition to the $14 million that was in the President's budget. I think this is very much needed, and I am hopeful that in the committee, we can some way manage to get that additional money for them.

You folks may proceed as you wish.

Mr. SHAUGHNESSY. I am going to yield my time to Mr. Lange and Mr. Kilday. Mr. Williamson has already spoken on behalf of the project, so at this point, with your permission, I have already filed my written statement. I will turn it over to Mr. Lange and Mr. Kilday.

[The statement of Mr. Shaughnessy and attachments follow:]

NORTH LOUP DIVISION
IRRIGATION
RECREATION
FISH AND WILDLIFE
SOCIAL AND
ECONOMIC STABILITY

TWIN LOUPS
RECLAMATION DISTRICT

*E

OFFICERS
PRESIDENT
Donald E. Hughes
Scotia
VICE PRESIDENT
Donald E. Kilday
Palmer
SECRETARY-TREASURER
Henry G. Lange
Ord

DIRECTORS
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PALMER
Donald E. Kilday
ST. PAUL
Dean C. Thede
SCOTIA
Donald E. Hughes
ATTORNEYS
Cyril P. Shaughnessy
Michael J. Shaughnessy
St. Paul

STATEMENT OF CYRIL P. SHAUGHNESSY, ST. PAUL, NEBRASKA,
IN SUPPORT OF THE NORTH LOUP DIVISION,
PICK-SLOAN MISSOURI BASIN PROGRAM, NEBRASKA
BEFORE THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS OF
THE UNITED STATES HOUSE OF REPRESENTATIVES
APRIL 16, 1986

Mr. Chairman and Members of the Committee:

My name is Cyril P. Shaughnessy, and I reside at St. Paul, Nebraska. Our group appears here today in support of the continued construction of the North Loup Division, Nebraska Project. The Budget Allotment of $14,036,000.00 for Fiscal Year 1987 is sought for the continued development, conservation, and wise use of the Water and Land Resources in the North Loup and Loup River Valleys.

It is my privilege to make this Statement on behalf of the Twin Loups Reclamation District and The Twin Loups Irrigation District. These Districts are the sponsoring organizations for the North Loup Division, Nebraska Project. This Multi-purpose Project is located in the Loup River Basin in Central Nebraska. This Project when completed will irrigate approximately 53,000 acres of land, provide ground water recharge, and will provide not only a stable and economical water supply for irrigation purposes, but will open opportunities for new agri-business, stablize employment, and provide much needed recreation, fish and wildlife.

With me today are Mr. Henry G. Lange, Secretary-Treasurer of the Twin Loups Reclamation District, and Mr. Donald E. Kilday, President of The Twin Loups Irrigation District and Vice-President of the Twin Loups Reclamation District. I am also pleased to have Mr. Dayle E. Williamson, Director of the Nebraska Natural Resources Commission, accompany our Group.

Mr. Chairman, permit me to express to you on behalf of the Directors of the two Districts their thanks to you and your Committee for your past support of the North Loup Division, Nebraska Project.

The last three years we have not appeared before your Committee in person but, rather, have submitted Statements to your Committee in support of continued funding and have reported to you on construction progress on the North Loup Division. This year we are pleased to have the opportunity to visit with you personally and renew some old aquaintances.

Exciting and happy events will occur on the 3rd and 4th of July of this year when the North Loup Division will be formally dedicated. This will be a gala celebration, especially so, for our Board members, some who have worked for over 40 years to see this day a reality. Our joint Boards today personally invite each and every member of your Committee to come out to Burwell, Nebraska on those days and help us celebrate this momentous occasion.

We believe at this point of time that we should submit to you and your Committee a brief progress report.

Water storage in the Calamus Dam and Reservoir began in October, 1985, and approximately 2,500 acres of water surface already have formed behind the Calamus Dam. Representatives of the Bureau of Reclamation informs us that they will fill the Calamus Dam and Reservoir in thirds over a three year period, carefully observing all instrumentation in the dam structure to assure the utmost safety during the initial filling process.

We are also informed that the Mirdan System will be completed early this Fall, and that the Geranium Systen should be completed early next Spring. That construction will bring initial irrigation service to some 22,670 acres for the Irrigation Season commencing in May of 1987. This is indeed a long awaited event since the initial concept of the North Loup Division was envisioned in the original Pick-Sloan plans of the Flood Control Act of 1944. It has been 27 years since the Bureau of Reclamation released the specific North Loup Division plans in 1959. Incidentally, that plan is nearly identical to the Project as it is being contructed.

Construction of recreation facilities around the Calamus Dam and Reservoir are under construction. The boat ramps are finished. Construction of the asphalt recreation roads, turnouts, parking areas, and camping pads is under contract by the Nebraska Game and Parks Commission through the Nebraska Department of Roads and will be completed in Mid-summer. By this Fall it is anticipated that all the utilities, shelters and equipment will be in place.

Public Law 89-72 provides for cost-sharing of recreation facilities on a 50-50 basis, Federal and non-Federal. In the case of recreation facilities at the Calamus Dam and Reservoir, Federal funding will amount to about $570,000.00 while State funding will amount to about $1,040,000.00.

A Second Agreement for cost sharing of fish and wildlife enhancement facilities under Public Law 89-72 was executed with the Nebraska Game and Parks Commission on May 31, 1985. The Agreement provides for cost sharing, 75% Federal and 25% State, for a Fish Hatchery below the Calamus Dam and Reservoir and for initial fish stock in the Calamus Dam and Reservoir. Federal funding is contingent upon increases in the authorized cost ceiling; however, the State of Nebraska has already stocked some 2,810,000 fish at a cost of about $181,500.00. This with no guarantees of any cost-sharing.

The Nebraska Game and Parks Commission is preparing to operate and maintain these recreation facilities on July 1, 1986. The Nebraska Legislature's Budget

Committee has included $117,000.00 for operation and maintenance of the recreation developments surrounding the Calamus Dam and Reservoir and we are confident that these funds will be available to the Nebraska Game and Parks Commission when Nebraska's Fiscal Year of 1986 begins on July 1, 1986. The State of Nebraska's commitments to the financing, construction, operation, and maintenance of the recreation development associated with the North Loup Division has been outstanding. With the severe strain on Nebraska's revenues caused by the continuing agricultural and agribusiness depression, the State's support is doubly outstanding.

You will note we have just summarized construction progress to date. As you can observe, the majority of construction progress to date has been on the Water Supply Works. We now need to complete the construction of the Distribution Works. Before any further major contract awards can be made, the authorized appropriations ceiling must be raised. The North Loup Division Project, like all other projects, and especially those planned many years ago, is caught in a situation of a limited authorized appropriation ceiling through no fault of the Reclamation District and the Irrigation District or the good people of our area who need this irrigation water to have an opportunity to stabilize their farming operations thereby enhancing their way of life in the Loup River Valleys.

The last contract award for a major feature was in March of 1985, when the Geranium System contract was awarded. The next contract award for a major feature, the Scotia System, is now scheduled for August, 1986, provided the authorized appropriation ceiling can be increased. We are further informed by the Bureau of Reclamation that rights-of-way acquisition for the Davis Creek Dam has been delayed pending ceiling increases. We understand that an award could be made in about nine months after such ceiling increases are made for the construction of the Davis Creek Dam.

On March 24, 1986, the Twin Loups Reclamation District executed a contract with the Bureau of Reclamation to undertake the operation and maintenance of the Water Supply Works and the Distribution Works during the interim period after construction is complete and before the time when the operation and maintenance responsibility is formally transferred to the Reclamation District and the Irrigation District under the terms of their respective Repayment Contracts.

Another contract with the Bureau of Reclamation providing that the Twin Loups Reclamation District will perform minor contruction activities associated with bringing the project facilities into full operation status has been tenatively agreed upon. We have every reason to believe that this Drainage and Minor Construction Contract will be executed by both parties forthwith.

A contract to construct the Operation Headquarters Building and Maintenance Yard near Scotia, Nebraska and the Caretaker's Resident at Calamus Dam and Reservoir was awarded on February 27, 1986 to Courtney Day, Inc., of Kansas City, Missouri. Completion of these facilities is scheduled for this coming Fall when our Districts plan to begin the staffing of an operation and maintenance organization to deliver irrigation water to our irrigators in the Spring of 1987.

As you can observe, those who make up the Board of Directors of the Reclamation District and Irrigation District are vigorously pursuing their responsiblities in the ultimate operation and maintenance of the North Loup Project.

On April 3, 1986, the Board of Directors of The Twin Loups Irrigation District approved a Contract creating an Operating Authority pursuant to the terms of the Irrigation District's Repayment Contract. This Contract provides the means of obtaining the optimum in the care, maintenance and operation of the Water Supply Works and the Distribution Works of the respective Districts. Then on April 7, 1986, the Board of Directors of the Twin Loups Reclamation District pursuant to the Reclamation District's Repayment Contract approved the Contract and, on that date, the officers of both Districts signed the Contract creating an Operating Authority.

Recently, the Boards of Directors were able to retain Mr. Keith Davis as the Acting Manager for the two Districts. Mr. Davis has recently retired as manager of the Loup Basin Reclamation District and his years of experience and expertise will be valuable to our Districts as we work with the Bureau of Reclamation on O&M matters.

On April 7, 1986, Mr. Ronald Wolf of Sargent, Nebraska, was retained as Manager for the two Districts. For approximately ten years, Mr. Wolf was employed as Unit Superintendent for The Sargent Irrigation District and the Loup Basin Reclamation District. His experience and Mr. Davis' guidance, the Directors enthusiastically look forward to an orderly implementation of the interim care, maintenance and operation of the Water Supply Works and the Distribution Works under the Operation and Maintenance Contract with the Bureau of Reclamation.

Your Committee already has thousands of letters of support for the North Loup Division in the records, and accordingly, we are not going to burden you with any more. However, let us assure you and your Committee that this support remains solid and continues to grow. We still receive inquiries from additional land owners requesting permission to receive irrigation service. Regretfully, the Boards cannot accommodate these requests at this time since full service to the 53,000 acres has already been authorized.

As you can observe from this report, that on this date, April 16, 1986, we are on threshold of seeing the North Loup Project completed to serve the alloted acreage. The Directors of both District are keenly aware of the restraints of Gramm-Rudman. Construction of the North Loup Division is beginning to slip and funding for its continued construction has been reduced substantially from Fiscal Year 1985. The appropriations for the North Loup Division in F. Y. 1984 were $36,420,000.00; F. Y. 1985 were $40,370,000.00; F. Y. 1986 were $24,249,000.00; and the F. Y. Budget Request before you Subcommittee is $14,036,000.00. The foregoing appropriations reflect a 65% reduction for funding for the continued construction of the North Loup Project in just two years. As stated, the Calamus Dam and Reservoir is fully completed. The Mirdan System and the Geranium System should be completed so that irrigation service some 22,670 acres can be provided for in the Summer of 1987. Accordingly, more that fifty percent of the North Loup Project is completed.

We are now confronted with the matter of having the assurance of this Sub-Committee that subsequent funds will be appropriated for the full and complete construction of the North Loup Division.

There is an old Adage in the Law that where there is a benefit there is a detriment. The detriment in this case is the matter the continued appropriations to assure the completion of the North Loup Project. We strongly support your endeavors on our behalf and pledge to you on this day that within the ability of the Water Users to so do, our Board of Directors stand firmly behind your Sub-Committee to authorize appropriations to complete the construction of the North Loup Division.

Hope is enternal. As in past years, farmers in our area are presently preparing their lands for the 1986 growing season. Those same farmers continue to express to our Directors that they are beginning to see "the light at the end of the tunnel" and that beginning in the Spring of 1987, those farmers residing in the Mirdan and Geranium Area will be assured of an adequate water supply to grow their crops to maturity. At that point of time those farmers and water users residing below the Mirdan and Geranium Area will know that in subsequent years, they too will be able to reap the benefits of a full and complete water supply to assure them of a stable and ecomonic way of life in the years ahead.

In summary, we are pleased and proud to have been able to give you, Mr. Chairman, and your Committee, this Progress Report. We are grateful to you and your Committee's past support of the North Loup Project. At this time, we request your favorable consideration for the continued funding of our North Loup Project and for your affirmative action to authorize appropriations to complete the construction of the North Loup Division.

Again, we thank you, Mr. Chairman, and your Committee for your long standing support of the North Loup Project.

Respectfully submitted,

Cyril P. Shaughnessy

Cyril P. Shaughnessy
Of SHAUGHNESSY & SHAUGHNESSY
Attorneys for the Twin Loups Reclamation District
and The Twin Loups Irrigation District

Written Testimony
for the
April 16, 1986 Meeting

of

The House Appropriation Subcommittee
on
Energy and Water Development

Prepared by

Dr. William L. Powers
Director, Water Resources Center
University of Nebraska - Lincoln
Lincoln, Nebraska

INTRODUCTION

Thank you for allowing me to submit written testimony before the Subcommittee on Energy and Water Development, House (Senate) Committee on Appropriations. This testimony is for support of a Northern Great Plains Solute Movement Laboratory needed to address groundwater quality problems beginning to concern the public. This proposal has the support of the University of Nebraska Board of Regents and the Governor's Office as seen by the attachments.

The use of agricultural chemicals in agricultural production has increased greatly during the past ten to fifteen years over the Northern Great Plains. In Nebraska alone some 30,000,000 lbs. of pesticide and 200,000,000 lbs. of fertilizer are used annually. Several instances of nitrate contamination have been reported in Nebraska. Some herbicides are now beginning to be detected in the groundwater.

Such reports of groundwater contamination have increased greatly over the past decade. This is partly due to more chemicals reaching the groundwater and partially due to better instrumentation that allows the measurement of chemicals in ever smaller amounts (parts per trillion in some instances). Nevertheless, the increasing number of contamination reports has created a concern for the health of those using groundwater as a source of drinking water.

As a result of this concern, the U.S. Environmental Protection Agency released a Groundwater Protection Strategy in 1984. The State of Nebraska also released a Nebraska Groundwater Quality Protection Strategy (one of the first in the nation) in February of 1985. Both of these strategies stress that remedial measures are extremely difficult and expensive. They stress pollutant source management and control as the most promising way of protecting groundwater.

In order to control (or manage) the sources of groundwater contamination, best management practices (BMP's) need to be developed and adopted. To develop BMP's, the fate and movement of chemicals (solutes) must be understood and predictable. This understanding and prediction capability can be accomplished through historical examination of past management practices and groundwater monitoring, development and calibration of simulation models, or controlled application coupled with extensive measurements. A combination of these is probably most desirable.

An interdisciplinary team of scientists having close access to a field research site and chemical analysis facilities is necessary to develop this understanding and prediction capability of the fate and movement of chemicals, i.e., a Solute Movement Laboratory needs to be established. The National Center for Groundwater Research (a consortium of universities in Texas and Oklahoma) partially serves this purpose for the Southern Great Plains region. However, no such facility exists for the Northern Great Plains area which differs in geology, climate, soils and agriculture practices from the southern region.

This is a proposal to establish a facility for the study of the fate and movement of chemicals through and below soils common to the Northern Great Plains region. Such a facility could be called a Solute Movement Laboratory and consists of a chemical analysis laboratory at the University of Nebraska in Lincoln with field laboratories in North Platte and perhaps surrounding states of the Northern Great Plains. The whole system would be called the Great Plains Solute Movement Laboratory.

To study the fate and movement of chemicals in soils and aquifers, scientists would sample the soil solution and the aquifer below field laboratory sites to which the chemicals have been added. These field sites would be heavily instrumented and monitored. Because sophisticated instruments would be needed to analyze the samples for the array of chemicals being applied, they would be sent to the chemical analysis laboratory at the University of Nebraska in Lincoln. The anlysis laboratory would serve as the focal point and center of coordination for solute movement studies in the Northern Great Plains.

FIELD LABORATORY SITES

The facility at North Platte is an example of a typical field laboratory. Land owned by the University and cooperators will be available to be used as a field research site. The North Platte area has soils typical of the Northern Great Plains region. The site will be instrumented and operated so as to sample the soil, soil solution and groundwater. To support the research, other sites operated by the University and on surrounding farms, space for sample preparation, as well as office space for addtional professional staff, will be constructed near the headquarters of the West Central Research and Extension Center.

Initially the hydrologic and chemical characteristics of the field site will be determined. Some of the many models developed elsewhere to predict the fate and movement of the common agricultural chemicals will be calibrated for the experimental site characteristics. The site will be intensively instrumented. Soil and water will be sampled under various management systems. The samples will be analyzed at the University of Nebraska in Lincoln so as chemicals are added to the soil their fate and movement can be traced as the water migrates to and through the groundwater.

Early research activity will be directed toward developing best management practices for an emerging technology called "chemigation", where chemicals are applied through an irrigation system. Irrigation sytems will be evaluated for their efficiency of application as well as devices for preventing direct spills down the well to the groundwater from a malfunction. The use and effectiveness of various chemicals and application rates for different cropping systems will be evaluated.

Past chemical application times and rates by cooperating private irrigators will be determined from their records. These will be compared with the analysis of soil and groundwater samples. This will provide an indication of the fate and movement of previously applied chemicals to supplement information to be obtained as controlled study sites become operational.

THE CHEMICAL ANALYSIS LABORATORY

The laboratory facility in Lincoln will house hydrologists, hydrochemists, chemists, hydrophysicists, soil scientists, weed scientists and entomologists, as well as support personnel (graduate students, electronic technician, glass blower, etc.) and their equipment. The building to house the laboratory should have the basics necessary for a 780 VAX computer room, sediment sorption labs, wet labs with purified water systems, GC mass spectroscopy lab, light gas isotope ratio lab (constant temperature), conference room, offices, electronic and glass blowing shop. Such instruments as a GC mass spectrometer, atomic adsorption unit, radium mass spectrometer are needed to analyze the samples from the field sites. Because of the great array of chemicals to be quantified and the sophisticated instruments needed, only one such centralized analytical laboratory is practical for the region. Presently many samples are sent outside the region for analysis.

ESTIMATED BUDGET

The cost of the centralized analytical laboratory (including the necessary instrumentation and lab equipment) is estimated to be $2,550,000 of which $250,000 is from non-federal sources.

The cost of the fully instrumented North Platte field site is estimated to be $1,718,300 of which $770,000 will be from non-federal sources. An additional $751,700 would be needed to expand the laboratory and office facilities at the West Central Nebraska Research and Extension Center headquarters at North Platte. The operation of the North Platte Field Site and the Lincoln Analytical Laboratory would be funded from a combination of state, private and federal sources. Of the estimated $4,000,000 of state operating funds for the next five years, about $2,361,500 would be from redirection of existing funds. The remaining $1,700,000 will be sought from state appropriations as part of an accelerated hydrology program endorsed by a Board of Regents resolution (see attachment). Of the $1,985,000 in private funds, an estimated $1,295,000 is pledged including the land for the field site. The operating support from federal sources would be from such agencies as the U.S. Geological Survey, the U.S. Environmental Protection Agency and the National Science Foundation in the amount of about $1,000,000 in research grants over the next five years (this amount is typical of previous grants). The total cost of the Northern Great Plains Solute Movement Laboratory would depend upon the number of field laboratory sites.

The above breakdown shows a cost share of a little over 54% by non-federal sources in the total cost of facilities and operation.

ESTIMATED FIVE YEAR BUDGET

ESTIMATED FIVE-YEAR BUDGET FOR A SOLUTE MOVEMENT LABORATORY SYSTEM
UNIVERSITY OF NEBRASKA PRIVATE GRANTS/GIFTS AND FEDERAL SUPPORT

	State	Private	Federal Water Grants	Special Federal Funds	TOTAL
UN-L Campus-Solute Movement Analytical Laboratory					
Staff Support (5 professional, technician, operating)	$2,500,000	200,000			$2,700,000
Laboratory/Office Development				1,090,000	1,090,000
Equipment, Instrumentation	250,000			1,210,000	1,460,000
Special Project Support		975,000	1,000,000		1,975,000
TOTALS	$2,750,000	1,175,000	1,000,000	2,300,000	$7,225,000
West Central Research & Extension Center Field Solute Movement Laboratory					
Staff support (2 professional, technician, operating)	$ 961,500				$ 961,500
Laboratory/Office Development		300,000		751,700	1,051,700
Field Lab Land		320,000			320,000
Field Lab Buildings	300,000	50,000			350,000
Equipment, Instrumentation	50,000	50,000		948,300	1,048,300
Special Project Support		90,000	75,000		165,000
TOTALS	$1,311,500	810,000	75,000	1,700,000	$3,896,500
GRAND TOTALS	$4,061,500	1,985,000	1,075,000	4,000,000	$11,121,500

RESOLUTION PASSED BY THE BOARD OF REGENTS
Of The University of Nebraska

Presented By

Regent Robert G. Simmons, Jr.
January 18, 1986

WHEREAS, the State of Nebraska has the largest underground water resources in the United States, with the accruing agricultural/industrial opportunities and natural resource responsibilities; and,

WHEREAS, there is a growing national concern for the protection of groundwater quality, both from general industrial pollution and from the extensive use of fertilizers and pesticides in commercial agriculture through direct applications to the land through irrigation systems; and,

WHEREAS, existing or proposed regulatory legislation is not supported by an adequate research base related to the control of water quality and groundwater use; and,

WHEREAS, the University of Nebraska has responsibilities to generate basic research, educational programs and management practices for commercial applications; and,

WHEREAS, the Board of Regents has previously recognized the importance of research and educational responsibilities in the field of water, by stating in the Agriculture 2001 Report: "We recommend a greatly enhanced program in the teaching, research and extension with a major emphasis on research to include water management, water quality ..."; and,

WHEREAS, the water science curriculum of the University of Nebraska-Lincoln should be strengthened to be commensurate with the research evidence and educational programs for Nebraska citizens regarding water quality protection and water use;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Regents of the University of Nebraska:

1. Recognizes the importance and high priority of a strong water science graduate program at UNL.
2. Endorses existing plans to strengthen Hydrology graduate programs at UNL through reallocation of resources, requests for additional state funds, and proposals for outside grant and contract funds.
3. Encourages the development of a proposal for federal funding, to be submitted to the most appropriate agency, to support a Northern Great Plains Solute Movement Laboratory in Nebraska.

STATE OF NEBRASKA
ROBERT KERREY • GOVERNOR

February 20, 1986

The Honorable Virginia Smith
U.S. House of Representatives
1005 Longworth Building
Washington, D.C. 20515

Dear Virginia:

This is to endorse the concept of a Northern Great Plains Solute Movement Laboratory being presented to you by a group of citizens from North Platte and the University of Nebraska.

As you know, this office has been very interested in protecting the ground water quality of the State of Nebraska. We have been working closely with the U.S. Environmental Protection Agency (EPA) over the past few years. The Nebraska Department of Environmental Control (DEC), EPA and the University of Nebraska-Lincoln (UNL) co-sponsored a workshop in 1984 on research and educational needs relating to ground water protection.

In 1985 Nebraska became one of the first states to develop a Ground Water Quality Protection Strategy and, in fact, became the first state to receive a federal ground water quality grant. The Department of Environnmental Control was instrumental in developing this strategy and has assumed a leadership role in legislation and programs focused at protecting the quality of Nebraska's valuable ground water resource.

We also find that the citizens of the state, along with industry in the region, are interested in maintaining a good supply of fresh ground water. For example, a group of citizens have recently formed a Nebraska Groundwater Foundation and the Burlington Northern Railroad Foundation has given the University a grant to study the impacts of the new technology of chemigation. This grant, along with funds from EPA, has resulted in a National Chemigation Workshop with proceedings to be published soon.

This interest has been a key to the emerging reputation for Nebraska as a leader in developing programs for wise, safe and efficient use of agricultural chemicals. We feel that the establishment of a Northern Great Plains Solute Movement Laboratory in Nebraska will greatly enhance the protection of the ground water in the region while allowing for the continued use of these agricultural chemicals so important to the economy of the region. This laboratory will also assist Nebraska in the attainment of the goals outlined in our Ground Water Protection Strategy.

OFFICE OF THE GOVERNOR, BOX 94848, LINCOLN, NEBRASKA 68509-4848, PHONE (402) 471-2244
AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

I support the concept presented in the proposal for a Northern Great Plains Solute Movement Laboratory and the need to shape Nebraska's ground water quality protection programs based on site-specific research. I also support strong coordination between the Department of Environmental Control, U.S. EPA and the University so as to assure research focused toward the most immediate ground water protection needs.

If this office can be of service as you seek federal funds for this laboratory, please feel free to contact me.

Sincerely,

Robert Kerrey
Governor

TESTIMONY

BY

RODNEY K. GANGWISH

SHELTON, NEBRASKA

TO:

UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HOUSE COMMITTEE ON APPROPRIATIONS

THE HONORABLE TOM BEVILL, CHAIRMAN

REQUEST: $401,000.00 for Fiscal 1987

FUNDING PURPOSE: Completion of Feasibility Study by U.S. Bureau of Reclamation

PROJECT: Prairie Bend Unit

LOCATION: Dawson, Buffalo and Hall Counties in Nebraska

PROJECT PURPOSE: Irrigation, stabilization of ground water levels, enhancement of water quality, small community and rural domestic water supplies, fish and wildlife habitat, flood control, public outdoor recreation and other purposes determined to be appropriate.

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Bevill:

I would like to take this opportunity to submit written testimony in support of continuing the feasibility study for the Prairie Bend Unit by the Bureau of Reclamation.

I am a landowner and live two and a quarter miles south, and two and a quarter miles west of Shelton, Nebraska, within the boundaries of the proposed Prairie Bend Unit and am actively engaged in a farming partnership with my brother and my father.

I wish to convey to you a growing concern on the part of myself and my neighbors about the future of irrigated agriculture in our area.

We have ground water declines of 15 to 25 feet in the area with a significant decrease in well production. In most areas of the northern part of the Prairie Bend Unit, the top water Pleistocene formation has been depleted. Some of these shallow wells in the northern reaches of the area that were yielding 700 to 800 gallons per minute 10 years ago and now yield less than 150 gallons per minute. These shallow wells have been replaced with deep wells drilled into the Ogallala aquifer. The problem is that in some areas the Ogallala formation either does not exist or is not that productive and is yielding only 400 gallons per minute.

The land we farm that lies close to the Platte River (within two to four miles) also has no deep water Ogallala aquifer. The wells on this land have decreased up to 25 percent in output over the last 15 to 20 years.

This trend is alarming to me, and when we take into account the projections of ground water models and studies, such as the Platte River Basin Level B Study conducted by the Missouri River Basin Commission, our future for sustained irrigated agriculture is in serious jeopardy.

In addition, there are water quality problems. All of the residents and towns in the area get their drinking water from ground water. Several communities have problems because their nitrate content is above the Public Health Service's recommended maximum. I had to replace my well four years ago because it was yielding water with this same problem.

Flooding is another problem and, although not frequent, can cause a great deal of damage. There was in excess of $30,000,000.00 damage in the 1967 flood between Kearney and Columbus, much of which was in the proposed project area.

I feel the mood of the people in our rural area and in the surrounding communities of Grand Island and Kearney, have changed to the point that they are ready to face up to these challenges. We envision a project that would not only supplement irrigated water supply, stabilize ground water levels and enhance ground water quality, but would enhance municipal and rural domestic water supplies and provide fish and wildlife habitat, public outdoor recreation and flood control. One or more of these facets of the project would appeal to every citizen of our area in addition to stabilizing the economy of irrigated agriculture.

These are some of the reasons for the strong base of support the project has throughout the valley.

As you can see, we are not talking about a single purpose irrigation project, but a multi-purpose water resources project that would address all of these needs and more.

My neighbors and I support this type of project which will meet our needs for our future in irrigated agriculture. If we do not have some solutions to our challenges, we will be faced with turning irrigated acres back to dry land.

We in the Prairie Bend Unit urge you to support the continuation of the feasibility study.

Respectfully yours,

Rodney K. Gangwish
Shelton, Nebraska 68876

TESTIMONY

BY

RONALD G. HARGENS

CAIRO, NEBRASKA

TO:

UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HOUSE COMMITTEE ON APPROPRIATIONS

THE HONORABLE TOM BEVILL, CHAIRMAN

REQUEST:	$401,000.00 for Fiscal 1987
FUNDING PURPOSE:	Completion of Feasibility Study by U.S. Bureau of Reclamation
PROJECT:	Prairie Bend Unit
LOCATION:	Dawson, Buffalo and Hall Counties in Nebraska
PROJECT PURPOSE:	Irrigation, stabilization of ground water levels, enhancement of water quality, small community and rural domestic water supplies, fish and wildlife habitat, flood control, public outdoor recreation and other purposes determined to be appropriate.

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Bevill:

I farm between Cairo and Wood River in the approximate center of the Prairie Bend area. I am 38 years old and have always lived in this area and have farmed for 21 years for myself.

In that time period I have seen the shallow wells go dry, being replaced by deep wells, tripling the horsepower requirements for irrigation water. On the land I farm there have been six irrigation wells abandoned for lack of production. Replacement wells were drilled at a greater depth to sustain irrigation.

According to the Bureau of Reclamation studies, and other studies done by private engineering firms, it is shown that in parts of the Prairie Bend area the aquifer life to sustain irrigation is 25 years or less.

In the same period the nitrate level of our house well has increased to 13 parts per million, three parts per million above the drinking water quality standard. Since we discovered this high level of nitrate in our drinking water we have been hauling bottled water for drinking.

To solve some of our problems, the Central Nebraska Conservation Association (Prairie Bend) was formed by a group of farmers and landowners from the Cairo, Wood River and Shelton area in western Hall and eastern Buffalo Counties in Nebraska. The purpose of the organization is to develop an irrigation and ground water recharge project to combat declining water tables and well production in much of the area.

To do this we filed a water right application in March of 1976 with the State of Nebraska to divert, store and use Platte River water. In October, 1976 we went to the Central Platte Natural Resources District, a local government subdivision, to ask them to assist us in securing a feasibility study. The Board of Directors unanimously decided to help us because of the existing and future water problems. Together we began seeking assistance from the Bureau of Reclamation to have them do an appraisal and feasibility study of the area.

The Upper Platte River Study has been completed by the federal government and the Prairie Bend area was part of the study. The study shows that there is a feasible project in the area.

Our Nebraska delegation secured authorization and funding approval in both the House and the Senate for the feasibility study in 1983 and the study is now underway. The Central Platte Natural Resources District has budgeted $240,000.00 to help fund the feasibility study and additional financial support is being offered from the Central Nebraska Conservation Association.

The project is being supported by several area groups and organizations: the Hall County Board of Supervisors, Buffalo County Board of Supervisors, Kearney Chamber of Commerce, Grand Island Chamber of Commerce, City of Grand Island, the towns of Cairo, Shelton and Wood River, Central Platte Natural Resources District, the Nebraska Natural Resources Commission, Nebraska Water Resources Association and several other groups and organizations.

An attitude survey poll was conducted by the Central Platte Natural Resources District, Central Nebraska Conservation Association, Whooping Crane Habitat Maintenance Trust and the Grand Island Chamber of Commerce. The poll was taken in the Central Platte River Valley and showed the people were very much in favor of a water storage project in the area. Of those who had an opinion, 85 percent were in favor.

With this amount of State and local support, and the existing and future water problems of water quality and supply, we feel it is of utmost importance that the feasibility study be continued in order to determine what can be done to solve the problems.

Therefore, I am submitting this testimony to request your continued support of the Prairie Bend feasibility study being conducted by the Bureau of Reclamation. The study has been going very well, so I decided to submit this written testimony instead of taking up valuable committee time with oral testimony on an unopposed study.

Respectfully yours,

Ronald K Hargens

Ronald G. Hargens
Cairo, Nebraska 68824

TESTIMONY

BY

DOUG THOMPSON

WOOD RIVER, NEBRASKA

TO:

UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HOUSE COMMITTEE ON APPROPRIATIONS

THE HONORABLE TOM BEVILL, CHAIRMAN

REQUEST:	$401,000.00 for Fiscal 1987
FUNDING PURPOSE:	Completion of Feasibility Study by U.S. Bureau of Reclamation
PROJECT:	Prairie Bend Unit
LOCATION:	Dawson, Buffalo and Hall Counties in Nebraska
PROJECT PURPOSE:	Irrigation, stabilization of ground water levels, enhancement of water quality, small community and rural domestic water supplies, fish and wildlife habitat, flood control, public outdoor recreation and other purposes determined to be appropriate.

Rural Route 3
Wood River, Nebraska 68883

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Bevill:

I sincerely ask the Committee to seriously consider the request for the approval of funds for continuation of the feasibility study of the Prairie Bend Project in Central Nebraska.

This project is essential to the irrigated economy of the Hall/Buffalo County area. The area included in the project has been experiencing significant ground water declines over the past twenty years and the projections of declines for the coming years are disastrous.

As a farmer who has lived and farmed in the western Hall County area my entire life (as did my father and grandfather), I have seen our wells that at one time would pump 1,000 gallons per minutes from 60 feet deep, decline to 500 gallons per minute at 200 feet deep. The replacement cost of these "deep" wells into the Ogallala aquifer is staggering (approximately $15,000.00 per well), not to mention the increased energy requirements which are approximately triple.

The Prairie Bend Project would not only surface irrigate a considerable portion of the area, but would provide us the much needed recharge of the underground aquifer for continued pump irrigation.

The area to be served by this project is not marginal land which would be developed for irrigation should the project be built; it is for practical purposes, all Class I prime farmland which has already been developed and irrigated over the last 40 years. This entire area of Nebraska operates on an irrigated economy, not only the farmers, but all businesses which are interrelated to them. Considering the condition of the present farm economy, should the area be reverted to a dry land economy, the consequences would be disastrous.

Local support for the project is tremendous. The Central Nebraska Conservation Association (Prairie Bend) is operated strictly on donations from area farmers and businessmen, and has worked in conjunction with the Central Platte Natural Resources District on the project. In addition to the $240,000.00 committed to the project by Central Platte Natural Resources District, many in-kind services have been and will continue to be rendered by both groups.

The futures of my family and neighbors will hinge upon this project; and therefore, I hope you will give it your most serious consideration.

Respectfully yours,

Doug Thompson

Doug Thompson

TESTIMONY

BY

MARVIN J. RICKERT

WOOD RIVER, NEBRASKA

TO:

UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HOUSE COMMITTEE ON APPROPRIATIONS

THE HONORABLE TOM BEVILL, CHAIRMAN

REQUEST:	$401,000.00 for Fiscal 1987
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The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, DC 20515

Mr. Chairman....Committee Members:

I, Marvin Rickert, being a farmer who has lived in the Prairie Bend water project area my whole life and having farmed for nearly 30 years in this area, realize the water declines and the need of a water project.

I am asking for your continued support of the Prairie Bend feasibility study being conducted by the Bureau of Reclamation. The local support for this project is tremendous.

I want to thank you for your support in the past and for your future support in solving our water problems.

Respectfully yours,

Marvin J Rickert

Marvin J. Rickert
Rural Route 3
Wood River, Nebraska 68883

TESTIMONY

BY

CENTRAL PLATTE NATURAL RESOURCES DISTRICT

GRAND ISLAND, NEBRASKA

TO:

UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HOUSE COMMITTEE ON APPROPRIATIONS

THE HONORABLE TOM BEVILL, CHAIRMAN

REQUEST:	$401,000.00 for Fiscal 1987
FUNDING PURPOSE:	Completion of Feasibility Study by U.S. Bureau of Reclamation
PROJECT:	Prairie Bend Unit
LOCATION:	Dawson, Buffalo and Hall Counties in Nebraska
PROJECT PURPOSE:	Irrigation, stabilization of ground water levels, enhancement of water quality, small community and rural domestic water supplies, fish and wildlife habitat, flood control, public outdoor recreation and other purposes determined to be appropriate.

Mr. Chairman....Committee Members:

My name is Ron Bishop and I am General Manager for the Central Platte Natural Resources District. Our Central Platte Natural Resources District covers part or all of the ten counties in south central Nebraska that encompass the Platte River and its drainage areas along a 175 mile stretch extending from Gothenburg, Nebraska on the west to Columbus, Nebraska on the east.

A number of serious problems and critical needs relating to water exist within our Natural Resources District area. The economy of the area and the well-being of the people residing therein is dependent upon irrigated agriculture with the primary source of irrigation water being ground water.

The ground water levels, however, have been declining, causing an increase in pumping costs and an accompanying reduction in well production. The current ground water level declines of up to 25 feet are predicted to increase over the next 20 to 35 years to the point where thousands of irrigated acres will revert to dry-land without some kind of a supplemental supply project.

Additionally, each and every one of the over one hundred thousand residents within our Natural Resources District gets their drinking water supply from ground water but ground water quality problems have developed in the eastern half of our District to the point where a number of municipalities have had to abandon wells because the nitrate levels exceeded the U.S. Public Health Service's published maximum safe level for human consumption.

The area is also subject to infrequent but severe flooding. The single flood event of June 1967 caused over $30,000,000.00 worth of damage in the eastern half of our Natural Resources District alone.

In addition to those three major problems there are also some needs related to water within our area.

First of all, there is a need to maintain adequate water supplies for the waterfowl, fish and wildlife that currently utilize the area. The Big Bend area of the Platte River Basin in Nebraska plays host to five to seven million migratory waterfowl each and every year.

There is also a need within our area for water based recreation facilities for our residents and the other residents of central Nebraska.

Senator James Exon, Senator Edward Zorinsky, Congresswoman Virginia Smith and our Natural Resources District along with several other organizations, groups, associations and individuals have been working for a number of years toward getting a water resources project implemented in the area that would resolve those problems and address those needs.

The project that is needed and envisioned by the study sponsors, which are our Natural Resources District, the Central Nebraska Conservation Association and the Twin Valley Conservation

Association, is not a single purpose irrigation project but a comprehensive multi-purpose water resources project.

We have good reason to believe that one project could:

(1) supply supplemental irrigation water
(2) stabilize the declining ground water levels
(3) enhance ground water quality
(4) protect and enhance the quality of the municipal, small communities and rural domestic water supplies
(5) provide fish and wildlife habitat
(6) provide flood control and reduce flood damage, and
(7) provide public outdoor recreation for the residents of south-central Nebraska.

In addition, we feel the project can be designed so that it recognizes and addresses the need for maintaining flows in the Platte River at the critical times for such instream and downstream uses as:

(1) ground water recharge for irrigation and rural domestic supplies
(2) induced recharge for municipal water supplies
(3) migratory waterfowl
(4) maintenance of sub-irrigated crops
(5) maintenance of wet meadows and wetlands
(6) water quality enhancement in surface and ground water, and
(7) fish and wildlife.

We have already made a considerable amount of up-front progress toward making the project a reality. Numerous studies, programs and data gathering efforts have been conducted that will aid in the preparation of the feasibility study.

(1) Water Quality Studies. The water quality studies and programs that have already been conducted will be beneficial to the planning of the water resources project as it relates to identification of water quality problem area, extent of the problem and effective methods of improving the ground water quality.

The local people, through our Central Platte Natural Resources District, have provided over $400,000.00 in cash toward those studies to date, in addition to the hundreds of man hours involved.

The funding by the State of Nebraska toward those studies has been approximately equal to the local contribution.

(2) Ground Water Model. Our Central Platte Natural Resources District and the Lower Loup Natural Resources District, which borders us on the north, under contract with the U.S. Geological Survey, has developed a detailed ground water flow model of the ground water basin lying between the Loups and Platte River from the Lincoln-Dawson County line eastward, which encompasses the proposed project area.

The approximate cost of this ground water flow model and its subsequent operation is $250,000.00 with assistance through the U.S. Geological Survey on the original development costs.

The ground water model is now available as a planning tool in evaluating the various alternatives available for the water resources project.

(3) Study of Engineering Alternatives. Our Natural Resources District contracted with the Denver, Colorado office of the engineering firm of CH2M Hill to look at various project alternatives available to the local people. One set of alternatives the firm evaluated was the physical or engineering alternatives available to address the water supply needs of the project area.

(4) Study of Financial Options. Another set of alternatives evaluated by CH2M Hill firm were the options available to the local people for financing or assisting in the financing of the water resources program.

(5) Study of Institutional Options. The third set of alternatives evaluated by CH2M Hill for the District were the options available to the local people for establishing an organization to develop, manage and operate a water resources program.

The studies by the private firm of the engineering alternatives along with the study of the financial and institutional options was done under contract to, and paid for by, the Natural Resources District at a cost of approximately $35,000.00.

(6) Hydrologic and Water Resources Investigation. The engineering firm of Henningson, Durham and Richardson from Omaha, Nebraska conducted an investigation of the water availability in the Platte River and the preliminary water needs of the proposed project area. The investigation and studies by Henningson, Durham and Richardson were done under contract to, and paid for by, local interests at a cost of approximately $23,000.00.

(7) U.S. Bureau of Reclamation's Appraisal Study. The Bureau made an evaluation of a supplemental water supply project for the eastern part of the proposed project area during their Upper Platte Basin Study.

The water budget studies indicate that ultimately some 35 to 40 percent of the arable land may be without a reliable water supply for irrigation purposes without a project.

Additional problems resulting in the predicted water table decline would include increased degradation of ground water quality and loss of wet meadow areas north of and adjacent to the Platte River.

(8) Central Platte Natural Resources District's Groundwater Management Plan. The Natural Resources District, in an effort to maximize the conservation and protection of our ground water supplies, has recently completed a ground water management plan that will complement the Prairie Bend Unit project. That ground water management plan has received the approval of the State of Nebraska and is scheduled to be implemented over the next 18 months.

All of the data from these plans, studies, programs, research and activities lead us to several conclusions:

(1) The water resources project is feasible from both an engineering and an economic viewpoint;

(2) There is sufficient unused flows in the Platte River that passes right through our Natural Resources District to provide the supplemental water needed;

(3) There is sufficient water available to recharge the ground water aquifer and stabilize the now declining ground water levels;

(4) That ground water recharge can also enhance ground water quality and protect the municipal, small community and rural domestic water supplies;

(5) There are good reservoir sites for the necessary storage available on Prairie Creek and on Wood River and its tributaries;

(6) Soils within the project area are highly suitable for irrigation with most of the land falling in the Soil Conservation Service's classification of "prime" agricultural land;

(7) Benefits from the project would more than cover the costs of building and operating the project;

(8) Large monetary, environmental and aesthetic benefits would occur from the development of fishing, wildlife and recreational aspects of the water and land use;

(9) Major flood control benefits could occur at little or no additional cost;

(10) Analyzing the project from an irrigation standpoint alone should have a favorable benefit:cost ratio of approximately 1.6 to 1;

(11) The Bureau of Reclamation indicated from their studies that a feasibility study of the project appears to be justified, both on the basis of need and on the basis of probable economic feasibility.

In summary, while we have major problems, there is a feasible solution. Feasible both from an engineering and an economic standpoint. The solution is a multi-purpose water resources project.

Our Natural Resources District Board, many other organizations from the area and people from our region are in support of, and committed to, this project.

We have the support of the State of Nebraska and we now have the necessary legislation. The U.S. Bureau of Reclamation was

authorized and funded to initiate the necessary feasibility studies in mid 1983 and began the investigations in the fall of 1983.

We are confident that a multi-purpose water resources project will prove to be feasible and, when developed, will make a major contribution to the stability of Central Nebraska's economy and to the people of the region and their well being, as well as enhance the fish and wildlife resources. We have contracted with the Bureau of Reclamation and are cost-sharing $240,000.00 of the feasibility study's cost plus considerable additional in-kind services.

To make such a program a reality we need your continued help and we need the continued help of the U.S. Bureau of Reclamation.

We would hope that you would all lend your strong individual and committee support to the Federal appropriation of at least $401,000.00 for Fiscal 1987 so that the Bureau of Reclamation can complete the feasibility study that we so earnestly need.

Thank you.

Mr. **Lange**. Mr. Chairman, ladies and gentlemen of the committee, as I said, it has been three years since we have been back here, and things have been going along very well.

The Calamus reservoir is complete. Forty-seven miles of feeder canal was done, about 22,000 acres of land would be ready for service next spring, and we still lack about 60 percent or 30-some-thousand acres to be served down-river.

The unfortunate thing about that is that my land is going to have water, but Don, who is on the other end there, will not. He has been working just as hard as I have. Until you build that end of the project, he is not going to get any water. There are seven towns affected.

Mrs. Smith and I were talking yesterday, and this is a point that is worth mentioning. This project, at the time when we formed our Reclamation District back in 1954, was estimated to cost $46 million.

Now, it is almost $300 million more than that. On the face of it, that is atrocious.

However, it is not all as bad as that. Since that time, we had OSHA, and EPA, we had the Endangered Species Act, the Grand Teton and the Equal Rights Employment. All of those are good programs, but all of them cost money.

Mr. **Myers** [presiding]. We have a vote under way, so we are going to have to take turns.

Mr. **Lange**. With OSHA, every contractor has to furnish toilets, hard hats and a multitude of other requirements, and equal opportunity, of course, means he has to employ about anybody that walks through the door.

Then we get the EPA, and that is what really bugged us. They started out back in 1968, they were then talking about a wet river. A law hadn't been passed yet, but we went down to our neighbors downstream, the blue-collar people who wanted to have some water in the river anyway, and with this coming along, it turned out to had to let some water in the river.

We needed everything that was there. As a result of that, we raised the Calamus Dam 10 feet, and we built the Tent Diversion Dam, and five miles of canal.

If we could have taken the direct flow water that was still in the river, the Red River Act took that away. We had the brook speckle back, and with that, we had to build a special structure up on Gracy Creek, to save the fish that are good for nothing.

More money. The Teton Dam failure, don't have to tell you about that, that added $20 million to the cost of our dam. We have got the safest dam built in the world today. There are nine safety features put in there, and seven were new to that dam.

Those things cost money. Probably the counter, though, with this environmental protection, what do you call it, the report anyway, the environmental statement, in 1976, you appropriated the first money.

We built a road, and then some people up there were opposing us, took us into court, because our statement wasn't adequate.

Four years later, we finally got through court, from 1976 to 1980, and the inflation in those four years just about doubled the cost of the project. We had 15 percent, one year 20 percent inflation, so we got started really for good.

In 1980, when the land was the highest it has ever been in this Nation, they were paying 15, $1,600 an acre for land that won't pay five.

This is what put the price up there, Mr. Chairman, and however, there is a little gain, even with adversity. We have a project that 85 percent of the distribution is in place.

We have a main canal, 27 miles of the main canal is the undercut, and we have a soil there, if you pack it, it gets about as hard as bricks.

In the old days, they made bricks out of that soil, so you got a canal that should leak very little water. This is also true about the major laterals, so we have done the original plan, they expected from 35 to 40 percent seepage, water loss, so you build storage of 140,000 acre/feet and hope you can use 100,000 of it on the land.

Today, we should have at least half of that to be safe. We just happen to have the land to put that water on. It will take our development period, until we take care of our own customers first, we have people who took their land out of the District 15 years ago, now want to get their land back in.

They will come in, but they will come in on a later water right, a lower fiddle, in other words.

We do have the land there, and when the time comes, actually we have got over 53,000 acres subscribed right now. We are kind of like the Indian, be a little problem that way, but I am sure it is not a serious problem, because I am sure Congress would be glad to have another 20 or 30,000 acres.

That is the substance of my remarks, and for whatever they are worth to you.

Mrs. SMITH. Thank you so much. You have worked on this so long and so hard and we know how many trips you have made, and how much work you have all three done out there.

If you have any questions, John, proceed.

Mr. MYERS. No, we have missed you the last couple of years.

Mr. SHAUGHNESSY. This may be our last hurrah.

Mrs. SMITH. I have one more group.

Mr. KILDAY. The only thing I have to say about it is where the project is at now is half-completed, and I am on the lower end, I don't need any water, and he is up there. The project is setting where nobody can afford it.

If you stopped the project right now, they can't afford the O&M and everything. We got to get the project completed before it will ever begin to pay back or anything else. That is the only thing I say, and if we can get the money and get it finished as quick as we can.

Thank you, Mrs. Smith.

Mrs. SMITH. That is what we all want. We will call on your group back there, Mike and Jim and Lee, just as soon as we return.

[Recess.]

WEDNESDAY, APRIL 16, 1986.

NRC

WITNESS

DR. GERALD M. POHOST, M.D., F.A.C.C., ON BEHALF OF THE AMERICAN COLLEGE OF CARDIOLOGY

Mr. BEVILL. The committee will come to order.

Dr. Pohost, we are pleased to have you with us.

Dr. POHOST. Thank you very much, Mr. Chairman.

Mr. Chairman, members of the subcommittee, I am Gerald Pohost, Director of the Division of Cardiovascular Disease at the University of Alabama at Birmingham School of Medicine. I appreciate the opportunity to submit a statement on the fiscal year 1987 appropriation to the Department of Energy on behalf of the American College of Cardiology, ACC.

The ACC is an organization of 14,000 physicians, and we are vitally concerned with development of medically-related imaging technology. Many of these developments were made possible by research funds provided by the subcommittee, and they have greatly increased our ability to diagnose and treat cardiovascular disease, the goal of our medical specialty.

My remarks today will focus upon two imaging technologies within nuclear medicine: magnetic resonance, or NMR imaging, and imaging using radioactive materials. I currently serve as the Chairman of the Cardiovascular Imaging Committee of the ACC, as a member of the American Heart Association/ACC Joint Task Force on Nuclear Cardiology, and as a member of the NRC Advisory Committee on the Medical Uses of Isotopes. I am Board-certified in the disciplines of cardiology, internal medicine, and nuclear medicine.

Earlier, you heard from Dr. Stanley Goldsmith, who appeared on behalf of the Society of Nuclear Medicine and the American College of Nuclear Physicians. Dr. Goldsmith's statement included an excellent review of several imaging technologies and their applications to a variety of human diseases.

The ACC agrees completely with Dr. Goldsmith's analysis that these developments promise both greatly increased health benefits as well as reduced costs of medical care. Accordingly, we strongly support his recommendation that during fiscal year 1987 it fund nuclear medicine research through the Department of Energy's Nuclear Medicine Application Program at least at its current level of $23.3 million. We also believe, with Dr. Goldsmith, that additional funds would be a wise investment.

I don't want to take the time to conduct a general review of all the imaging technologies, except to note many of these have important aspects to patients with heart disease. I would like to comment on a promising new technology, that of nuclear magnetic resonance imaging, which Dr. Goldsmith did not mention, possibly because it does not require the use of radioactive materials.

NMR is a new, non-invasive imaging method which permits visualization of the distribution of hydrogen throughout the body. This results in the ability to visualize the organs of the body, including the heart, brain, and other organs, with exquisite detail.

Nuclear magnetic resonance uses a combination of magnetic fields, radiowaves, together to ultimately allow monitoring of certain key elements in the body, in addition to hydrogen. They possess magnetic properties, as well. These include sodium, phosphorus, carbon, and potassium. The problem is that current instrumentation restricts clinical applications to just hydrogen.

The expansion of NMR technology to other elements, the ones I mentioned, unfortunately necessitates much stronger magnetic fields, which is a large technical hurdle at the present time. An ability to assess the concentration and location of these elements is a much more important area for biomedical research than present application involving hydrogen only.

For example, phosphorus is contained in key metabolic compounds within the cells which are instrumental in allowing energy released from biological fuel to be converted into cellular activity. This process allows the heart muscle to contract. When there is disease of the organs, the phosphorus will decrease, for example, in its concentration. Being able to see the phosphorus allows us to identify disease at an early stage.

To visualize such elements will require the development of an NMR instrument with a magnetic field approaching 10 Tesla; presently available instruments typically use a field of between .1 and 1.5 Tesla. The development of such a research instrument is an effort which I strongly believe needs to be undertaken, and it is my hope that the subcommittee may, at some future date, give consideration to such a project.

Finally, Mr. Chairman, I wish to address briefly the role of the Nuclear Regulatory Commission relative to the use of those imaging technologies which involve radioactive materials. As you know, the NRC has the responsibility for setting licensure requirements for physicians who use such materials in humans for diagnosis or therapy.

It is the firm position of the ACC that, in carrying out this responsibility, the NRC should seek, first and foremost, to ensure the public safety—in this instance, the safety of those patients for which such imaging procedures are appropriate. In so doing, it is incumbent upon the NRC to base its decision upon reasonable and objective information, without regard to tangential issues related to medical practice.

I am sure that you are all aware that when beneficial new medical technologies emerge, they sometimes alter the patterns of established medical practice among clinicians; and this, in turn, can create issues and concerns. More than a year ago, such a problem arose. It centered on the duration of training requirements set by the commission. It was your initiative, Mr. Chairman, and your inquiries to the commission, that resulted in an extensive series of consultations among all those concerned.

I am pleased to report that the NRC staff has listened carefully to all the comments made on this matter and is in the process of developing a recommendation to the commissioners on these training requirements. This would result in draft regulations being published in the Federal Register; at that time, all concerned organizations and individuals would have the opportunity to comment.

From my perspective and that of the ACC, the NRC staff is approaching this matter in a professional and competent manner. Thus, it is our view that the regulatory process is proceeding and that there is no need for concern.

I shall be happy to answer any questions that you may have.

[The statement of Dr. Pohost follows:]

AMERICAN COLLEGE OF CARDIOLOGY

STATEMENT OF

GERALD M. POHOST, M.D., F.A.C.C.

ON BEHALF OF THE
AMERICAN COLLEGE OF CARDIOLOGY

CONCERNING THE
DEPARTMENT OF ENERGY'S FISCAL YEAR 1987 BUDGET

BEFORE THE
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
OF THE
HOUSE APPROPRIATIONS COMMITTEE

APRIL 16, 1986

Mr. Chairman, members of the Subcommittee, my name is Gerald Pohost, and I am the Director of the Division of Cardiology in the School of Medicine at the University of Alabama at Birmingham. I appreciate the opportunity to submit a statement on the FY 1987 appropriation to the Department of Energy on behalf of the American College of Cardiology (ACC). The ACC is an organization of 14,000 physicians, and we are vitally concerned with development of medically-related imaging technology. Many of these developments were made possible by research funds provided by the Subcommittee, and they have greatly increased our ability to diagnose and treat cardiovascular disease - the goal of our medical specialty.

My remarks today will focus upon a new imaging technology within nuclear medicine: magnetic resonance or NMR imaging and imaging using radioactive materials. I currently serve as the Chairman of the Cardiovascular Imaging Committee of the ACC, as a member of the the American Heart Association/ACC Joint Task Force on Nuclear Cardiology, and as a member of the NRC Advisory Committee on the Medical Uses of Isotopes. I am board-certified in the disciplines of cardiology, internal medicine, and nuclear medicine.

On April 9, the Subcommittee heard from Dr. Stanley Goldsmith, who appeared on behalf of the Society of Nuclear Medicine and the American College of Nuclear Phyicians. Dr. Goldsmith's statement included an excellent review of several imaging technologies and their applications to a variety of human diseases. The ACC agrees completely with Dr. Goldsmith's analysis that these developments promise both greatly increased health benefits as well as reduced costs of medical care. Accordingly, we strongly support his recommendation to the Subcommittee that, during FY 1987, it fund nuclear medicine research through the Department of Energy's Nuclear Medicine Application Program at least at its current level of $23.3 million. We also believe, with Dr. Goldsmith, that additional funds would be a wise investment, if at all possible under the current budgetary restraint.

Comments on Nuclear Magnetic Resonance

I will not take time today to conduct another general review of imaging technology except to note, as did Dr. Goldsmith, that many of these methods have important application to patients with heart disease. However, I will comment briefly on the emerging technology of nuclear magnetic resonance which Dr. Goldsmith did not mention, possibly because it does not require the use of radioactive materials. Nuclear magnetic resonance imaging (NMR or sometimes MRI), is a new, noninvasive medical imaging method which presently permits visualization of the distribution of hydrogen throughout the body. As a result NMR allows detection of diseases involving the heart, brain and other organs. NMR technology is based on the combination of magnetic fields and radio waves which may ultimately allow monitoring of certain key elements in the body in addition to hydrogen which possess magnetic property such as sodium, phosphorus and carbon. However, current instrumentation restricts clincial application to hydrogen, severely limiting the ultimate potential of this technology.

Expansion of NMR technology to the other elements (carbon, phosphorus, sodium, etc.), unfortunately necessitates much stronger magnetic fields which is a large technical hurdle. An ability to assess the concentration and location of these elements is a much more important area for biomedical research than present application involving hydrogen only. For example, phosphorus is contained in key compounds within the cells which are instrumental in allowing energy released from biological "fuel" to be converted into cellular activity. This process allows the heart muscle to contract. Also, sodium is pumped from within the cell to the surrounding fluid and back into the blood. A disturbance in the health of the cell will lead to early accumulation of sodium within the cell due to inadequate function of the surrounding membrane.

To visualize such elements will require the development of an NMR instrument with a magnetic field approching 10 Tesla; presently available instruments typically use a field of between .1 and 1.5 Tesla. The development of such a research instrument is an effort which I strongly believe needs to be undertaken, and it is my hope that the Subcommittee may, at some future date, give consideration to such a project.

Finally, Mr. Chairman, I wish to address briefly the role of the Nuclear Regulatory Commission relative to the use of those imaging technologies which involve radioactive materials. As you know, the NRC has the responsibility for setting life licensure requirements for physicians who use such materials in humans for diagnosis or therapy.

It is the firm position of the ACC that, in carrying out this responsibility, the NRC should seek, first and foremost, to ensure the pubic safety - in this instance the safety of those patients for which such imaging procedures are appropriate. In so doing, it is incumbent upon the NRC to base its decision upon reasonable and objective information, without regard to tangential issues related to medical practice.

I am sure that you are all aware that when beneficial new medical technologies emerge, they sometimes alter the patterns of established practice among clinicians and this, in turn, can create issues and concerns. More than a year ago, indeed, such a problem arose. It centered on the duration of training requirements set by the Commission. It was your initiative, Mr. Chairman, and your inquiries to the Commission, that resulted in an extensive series of consultations among all the concerned groups. I am pleased to report that the NRC staff has listened carefully to all the comments made on this matter, and is in the process of developing a recommendation to the Commissioners on these training requirements. Presumably, this would result in draft regulations being published in the Federal Register; at that time, all concerned organizations and individuals would have the opportunity to comment. From my perspective and that of the ACC, the NRC staff is approaching this matter in a professional and competent manner. Thus, it is our view that the regulatory process is proceeding and that there is no need for concern.

I shall be happy to answer any questions that you may have.

Mr. **Bevill**. Thank you, Doctor, for your very fine presentation. We are, in Alabama, very proud of the University of Alabama at Birmingham Medical Center, and particularly the report we received a few days ago where the doctors in the country voted it—out of the top 25, it was number 3.

I know cardiology is one of the things that has been foremost in the nation. We appreciate the fine work you are doing.

I yield back to Mrs. Smith.

Wednesday, April 16, 1986.

NEBRASKA PROJECTS

WITNESSES

LEE SONDERUP, GENOA, NEBRASKA, PRESIDENT OF THE CEDAR VALLEY RECLAMATION DISTRICT

JAMES VANDERLOOP, SR., CEDAR RAPIDS, NEBRASKA, SECRETARY-TREASURER OF THE CEDAR VALLEY RECLAMATION DISTRICT

MICHAEL J. SHAUGHNESSY, ST. PAUL, NEBRASKA, COUNSEL, CEDAR VALLEY RECLAMATION DISTRICT

CLARENCE FRENZEN, FULLERTON, NEBRASKA, PAST PRESIDENT, CEDAR VALLEY RECLAMATION DISTRICT

Mrs. **Smith**. Thank you very much.

As our last group of witnesses, we have Mr. Michael Shaughnessy, Mr. Clarence Frenzen, and Mr. James Vanderloop.

May I introduce three very important ladies working behind these men: Louise Shaughnessy, Dorothy Kildare, and Anita Frenzen. Mr. Larry Moore is here also. I think that is all the Nebraskans we have here.

Mr. **Bevill**. It is nice to have you with us.

Mrs. **Smith**. We appreciate you folks being here.

Mr. **Shaughnessy**. Mr. Chairman, I am Michael Shaughnessy from St. Paul. I am an attorney representing the Cedar Valley Reclamation District.

With me are: Lee Sonderup, President of the District; Jim Vanderloop, Secretary-Treasurer; and Clarence Frenzen, Past President.

We request an appropriation of $55,000 to continue funding of the Loup River Basin Management Study. The Cedar Valley Reclamation District is the sponsoring entity for an irrigation project in Central Nebraska which comprises a dam and reservoir and will ultimately irrigate approximately 23,000 acres. The district, together with the Bureau of Reclamation and other State agencies, including the Natural Resource Commission, are cooperating in the study. We have been funded for $100,000 and request an additional $55,000 to continue the study.

The Loup Basin River in Nebraska is the central source for West Central and Central Nebraska. The Cedar River is a tributary of the Loup.

As I previously informed this committee, the purpose of the Loup Basin Management Study will be to assist Federal and State planners with an intelligent analysis of the water supply of the Loup

Basin. The Loup Basin already has among its boundaries several irrigation districts which includes the Twin Loups, which my dad, Henry, and John have previously testified about.

It is imperative for the future water development of our area that the water supply be quantified and clarified. We anticipate the study will cost approximately $1.5 million. The State of Nebraska will contribute 50 percent of that cost. They have undertaken or are in the midst of a sand hill study, which is a comprehensive study of our sand hills in Nebraska.

But, of course, the primary concern of our group, the Cedar Valley Reclamation District, is a study which we hope will originate in the Cedar Valley area, because frankly we are hopeful eventually to have a feasibility study to plan our particular district.

In closing, Mr. Chairman, I simply wish to reemphasize my belief that the future of the strong economic base in Nebraska will continue to be its agriculture. That strong base further depends upon the ability of farmers in Nebraska to have available to them a dependable water supply.

As submitted last year to this committee, our study has the support of the Governor, the Directors of the Nebraska Natural Resource Commission, Mr. Williams previously testified, the Nebraska Department of Water Resources, several mayors, county board chairmen, businessmen, and individuals in the Cedar River area.

I thank you for your time.

[The statement follows:]

THE CEDAR VALLEY RECLAMATION DISTRICT

JOINT STATEMENT OF LEE SONDERUP, GENOA, NEBRASKA,
JAMES VANDERLOOP, SR., CEDAR RAPIDS, NEBRASKA, AND
CLARENCE FRENZEN, FULLERTON, NEBRASKA
GIVEN BY
MICHAEL J. SHAUGHNESSY
IN SUPPORT OF THE LOUP RIVER BASIN MANAGEMENT STUDY
SPONSORED BY THE CEDAR VALLEY RECLAMATION DISTRICT
TO THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS OF
THE UNITED STATES HOUSE OF REPRESENTATIVES

APRIL 16, 1986

Dear Mr. Chairman and Members of the Committee:

My name in Michael J. Shaughnessy of St. Paul, Nebraska. I am an attorney, and I represent the Cedar Valley Reclamation District. With me today are Lee Sonderup, President of the District, James Vanderloop, Sr., Secretary-Treasurer of the District, and Clarence Frenzen, past President of the District. We appear before you today to request an appropriation of $55,000.00 to continue funding of the Loup River Basin Management Study.

The Cedar Valley Reclamation District is the sponsoring entity for an irrigation project in Central Nebraska located in the Cedar River Valley. Briefly, the proposed irrigation project would consist of a dam and reservoir near Spalding, Nebraska, and irrigate approximately 23,000 acres in the Cedar River Valley through gravity irrigation. The Cedar Valley Reclamation District is also the sponsoring authority for the Loup River Basin Management Study.

The District, together with the Bureau of Reclamation, and other State Agencies are cooperating in the Study. The Bureau of Reclamation would commence the study in the Cedar River Valley.

As this Committee may know, funding for the Study was approved last year, and funds are now necessary to continue the Study.

The Loup River Basin in Nebraska is a major water source for Central and West Central Nebraska. The Cedar River is a tributary of the Loup River. The Cedar River begins in the Sandhills of Nebraska, and flows into the Loup River near Fullerton, Nebraska.

As this Committee was previously informed, the purpose of the Loup River Basin Management Study will be to assist Federal and State Planners with an intelligent analysis of the water supply for the Loup Basin. The Loup Basin has several irrigation districts in operation including the Loup Basin Reclamation District, The Sargent Irrigation District, The Farwell Irrigation District, the Twin Loups Reclamation District, The Twin Loups Irrigation District, Middle Loup Public Power and Irrigation District, and North Loup Public Power and Irrigation

District. It is imperative for future water development in the Loup River Basin that our water supply be quantified and clarified.

We anticipate that the total Study will cost $1.5 Million. The State of Nebraska is cooperating on a cost share basis of 50%-50%. The Study will be at least a four year effort, and much of the cost share will come from the continuing study of the Sandhills in Nebraska by the Natural Resource Commission of Nebraska. It is anticipated that the State of Nebraska will be able to meet its cost share because of the Sandhills study, and its commitment to water development in Nebraska. Because of the State's commitment to cost share, it is imperative that funding for the Study be continued.

Of course, the primary concern for the Cedar Valley Reclamation District is the study of available water supply for purposes of irrigation. As I have previously stated to this Committee, it continues to be my judgment that the citizens of Nebraska will always be primarily supported economically by its agricultural base.

In closing, Mr. Chairman, and members of the Committee, I wish to re-emphasize my belief that the future of a strong economic base in Nebraska depends upon a strong agricultural base. A strong agricultural base further depends upon the ability of farmers in Nebraska to have available to them a dependable water supply for irrigation. Last year we submitted to this Committee, our support letters from Governor Kerrey of Nebraska, the Directors of the Nebraska Natural Resource Commission, the Nebraska Department of Water Resources, the Lower Loup Natural Resource District, Mayors and County Board Chairmans, Businessmen and Individuals in the Cedar River Basin Area. As I have previously stated, the requested Loup River Basin Management Study has a wide range of support.

Thank you.

Michael J. Shaughnessy
For the Cedar Valley Reclamation District

Mrs. **Smith**. I think this is a very important study. I hope we can find the funds to continue it as we started last year.

We certainly appreciate all four of you coming.

Mr. **Bevill**. We will work with Mrs. Smith to do whatever we can to accommodate you.

Mr. **Shaughnessy**. Thank you.

Wednesday, April 16, 1986.

GARRISON DIVERSION PROJECT

WITNESS

RUSSELL L. DUSHINSKE, CHAIRMAN, DEVILS LAKE

Mr. **Bevill**. Mr. Dushinske, your prepared statement will be made part of the record.

Mr. **Dushinske**. I am Russ Dushinske from North Dakota. I am from the Garrison Diversion Conservancy District. My statement is short, so I will take the liberty of reading it.

I also have a statement from the Governor.

Mr. **Bevill**. Without objection, that will be made part of the record.

Mr. **Dushinske**. As Chairman of the Garrison Diversion Conservancy District, I appreciate the opportunity to make a statement in support of appropriations for the Garrison Project in North Dakota. The Conservancy District that I represent is the instrumentality created by law in North Dakota to supervise and manage all non-Federal aspects of the Garrison Project.

As you know, the Garrison Project is part of the overall Pick-Sloan Plan for flood control and development of the Missouri River. The one million acres of irrigation called for in the 1944 Act represented the benefits it was determined North Dakota was entitled to as a result of the sacrifice of giving up 550,000 acres of rich bottomland for reservoir sites to benefit downstream States.

Construction began on the first 250,000-acre phase following the authorizing legislation in 1965. It is now about 25 percent complete. North Dakota has consistently and completely met all of the requirements and conditions for the non-Federal portions of the project.

You will also recall that in the Seventies, environmental organizations began challenging certain aspects of the project which resulted in a number of court cases, all of which were eventually resolved in favor of the project. In addition, Canada also expressed some concerns which resulted in a review by the International Joint Commission. Again, through project modifications and negotiations with Canada, a phased development program within the Missouri River Basin was developed which met Canadian concerns.

Because of continued opposition by environmental organizations, the Congress next created a special commission to make findings and recommendations in regard to the project. The commission recommendations would reduce the irrigation authorized in the project from the one million provided in the 1944 Act and the

250,000 authorized in the 1865 Act to 130,000 acres and increase the emphasis on the provision of municipal and industrial water.

Finally, after almost a year of negotiations between the State of North Dakota, the National Audubon Society, and the National Wildlife Federation, in an effort to meet further objections of those organizations, a compromise proposal for the project was agreed to. This compromise is contained in H.R. 1116, which has been recommended to the House Floor by the Committee on Interior and Insular Affairs. Action on the Floor of the House should occur within two weeks, and a favorable vote is anticipated. Early action in the Senate also is expected.

In view of the compromise project—and, hopefully, favorable action from Congress to reformulate the project—the Conservancy District urges that the nature of the $18 million appropriation contained in the budget to mothball the project be changed to authorize its use in construction and other activities in furtherance of the reformulated project.

We also ask that favorable consideration be given to the anticipated supplemental request from the Department of Interior of an additional $31 million for use on the project in fiscal year 1987.

Thank you again for the opportunity to make this presentation.

I might explain Representative Dorgan is over at the Rules Committee trying to get a rule on this so we can vote on it next week.

[The statement of Mr. Dushinske and statement of Governor Sinner follow:]

gdcd
GARRISON DIVERSION CONSERVANCY DISTRICT
P.O. BOX 140
CARRINGTON, NORTH DAKOTA 58421 701-652-3194

April 10, 1986

The Honorable Thomas Bevill, Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
House of Representatives
Washington, DC 20515

Dear Chairman Bevill:

As Chairman of the Garrison Diversion Conservancy District, I appreciate the opportunity to make a statement in support of appropriations for the Garrison Project in North Dakota. The Conservancy District that I represent is the instrumentality created by law in North Dakota to supervise and manage all nonfederal aspects of the Garrison Project.

As you know, the Garrison Project is part of the overall Pick-Sloan Plan for flood control and development of the Missouri River. The one million acres of irrigation called for in the 1944 Act represented the benefits it was determined North Dakota was entitled to as a result of the sacrifice of giving up 550,000 acres of rich bottomland for reservoir sites to benefit downstream states. Construction began on the first 250,000-acre phase following the authorizing legislation in 1965. North Dakota has consistently and completely met all of the requirements and conditions for the nonfederal portions of the project.

You will also recall that in the seventies, environmental organizations began challenging certain aspects of the project which resulted in a number of court cases, all of which were eventually resolved in favor of the project. In addition, Canada also expressed some concerns which resulted in a review by the International Joint Commission. Again, through project modifications and negotiations with Canada, a phased development program within the Missouri River Basin was developed which met Canadian concerns. Because of continued opposition by environmental organizations, the Congress next created a special Commission to make findings and recommendations in regard to the project. The Commission recommendations would reduce the irrigation authorized in the project from the one million provided in the 1944 Act and the 250,000 authorized in the 1965 Act to 130,000 acres and increase the emphasis on the provision of municipal and industrial

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Charles A. Richter, New Rockford
Jerrold L. Roble, Harvey
Harold E. Rygg, Portland
Thomas C. Shockman, LaMoure

water. Finally, after almost a year of negotiations between the State of North Dakota, the National Audubon Society, and the National Wildlife Federation in an effort to meet further objections of those organizations, a compromise proposal for the project was agreed to. This compromise is contained in H.B. 1116 which has been recommended to the House floor by the Committee on Interior and Insular Affairs. Action on the floor of the House should occur within two weeks, and a favorable vote is anticipated. Early action in the Senate is expected.

In view of the compromise project that is now supported by the national environmental and wildlife organizations as well as by both major North Dakota environmental and wildlife groups, and the favorable action that is expected from the Congress to reformulate the project, the Conservancy District urges that the nature of the eighteen million dollar appropriation contained in the budget to mothball the project be changed to authorize its use in construction and other activities in furtherance of the reformulated compromise project. We also ask that favorable consideration be given to the anticipated supplemental request from the Department of Interior of an additional thirty-one million dollars for use on the project in Fiscal Year 1987.

Thank you again for the opportunity to make this presentation.

Sincerely,

Russell L. Dushinske

Russell L. Dushinske
Chairman

RLD/glr

State of North Dakota
OFFICE OF THE GOVERNOR
BISMARCK, NORTH DAKOTA 58505
(701) 224-2200

GEORGE A. SINNER
GOVERNOR

April 9, 1986

The Honorable Thomas Bevill, Chairman
Subcommittee on Energy and Water
Committee on Appropriations
House of Representatives
Washington, D.C. 20515

Dear Chairman Bevill:

I am pleased to have the opportunity of filing this statement in support of appropriations for the Garrison Diversion Project in North Dakota.

As you know, the project has been the subject of controversy in the courts and the Congress for a number of years because of objections by environmental organizations. Yet, even the opponents have recognized that North Dakota is entitled to some type of a project because of the huge sacrifices made by the State in furnishing reservoir sites to provide flood control, navigation, and power to downstream states as part of the Pick-Sloan plan for the Missouri River.

In 1984, a special Congressional Commission was activated to study and make recommendations in regard to the project. Its recommendations would make major changes in reducing irrigation acreage, project costs, and increasing the project emphasis on providing municipal and industrial water. Finally, after additional negotiation between the State of North Dakota and the National Audubon Society and the National Wildlife Federation involving further changes in the commission recommendations asked for by the Society and Federation, a compromise is also supported by both major North Dakota environmental and wildlife organizations.

This compromise is reflected in HB 1116 which at this time has been recommended by the Committee on Interior and Insular Affairs of the House of Representatives. It will be considered on the floor of the House within the next two weeks and a favorable vote is expected.

Upon this basis, I urge the Committee to alter the purpose of the eighteen million dollar appropriation recommended in the budget from one which would mothball the project to one which would be used in further construction and activities as authorized in HB 1116. I further urge favorable consideration of a supplemental request in the amount of thirty-one million dollars which we anticipate will be submitted by the Department of the Interior to carry out the purposes of HB 1116.

Your support of this long promised and awaited project will be sincerely appreciated by North Dakota.

Sincerely,

George A. Sinner

George A. Sinner
Governor

GAS/CEM/lk

Mr. Bevill. We will be able to hear our friend, Congressman Dorgan, if he gets a chance to come over. If not, we can put his statement in the record.

We appreciate your statement.

Wednesday, April 16, 1986.

MEDICAL CENTER OF TECHNOLOGY, AND ENERGY DESIGN, ST. CHRISTOPHER'S HOSPITAL FOR CHILDREN

WITNESSES

HON. WILLIAM H. GRAY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

CALVIN BLAND, EXECUTIVE DIRECTOR, ST. CHRISTOPHER'S HOSPITAL FOR CHILDREN

Mr. Bevill. We are pleased to have our distinguished Chairman of the Budget Committee here, Chairman Bill Gray. You may submit your statement and proceed as you wish.

Mr. Gray. I am here, Mr. Chairman and members of the committee, to introduce to the committee someone we have great respect for in the City of Brotherly Love and Sisterly Affection. I would like to introduce to you Mr. Calvin Bland, Executive Director of the St. Christopher's Hospital for Children.

Mr. Bland is a member of the Board of the National Association of Children's Hospitals and Related Institutions. He is also a member of the Board of Trustees of the Hospital Educational and Research Foundation of the State of Pennsylvania.

St. Christopher's Hospital for Children is a major pediatric teaching hospital in Philadelphia, serving the surrounding Tri-State area. Although it is physically located in the district of our colleague, Mr. Foglietta, it also serves my district and indeed the entire city and the Tri-State area of Pennsylvania, Delaware, and New Jersey.

Mr. Bland is here today to tell you about a project of great importance to me and to the Tri-State area and to the City of Philadelphia, and I think also to the needy children of that Tri-State area, which St. Christopher's serves. I will let Mr. Bland tell you more about this project.

But we of the Philadelphia delegation are strongly supportive of it. I hope that the committee will have a receptive ear to this project and this concern.

Thank you, Mr. Chairman and members of the committee. I appreciate you giving me this opportunity of having the honor of introducing Mr. Bland.

Mr. Bevill. We are certainly glad to have you here, Mr. Bland. As you can see, the Chairman knows how to present a person very well. We know that, particularly, those of us who went with him to Philadelphia and learned they had Southern hospitality even in Philadelphia. We appreciate him and the good work he does up here. I know you do, too.

Mr. Bland. Thank you, Chairman Gray, for that very eloquent introduction.

Chairman Bevill, members of the committee, as Chairman Gray indicated, I am Calvin Bland, Executive Director of St. Christopher's Hospital for Children. I provided written testimony, but I certainly would like to take the opportunity to make a few brief comments regarding the St. Christopher's project and its importance not only to the City of Philadelphia and Tri-State region, but also to the nation in general.

A few words about St. Christopher's Hospital for Children. This is a very special place. It is a major medical center serving the Tri-State area with very specialized services, including the only burn center south of Boston and north of Washington, one of the largest cystic fibrosis programs on the East Coast, the only solid organ transplant in the Delaware Valley encompassing heart, liver and kidney transplantation, a premier cardiac and cardiac surgery program, and many specialized tertiary services for the region.

In addition, the institution serves as the family pediatrician for the low income children of North Central Philadelphia. We are indeed the economic anchor of that area.

St. Christopher's is really known for its innovations, both clinically and organizationally. Angelo DeGeorge, the Chief of Endocrinology at St. Christopher's, discovered and prescribed the treatment for what is known as DeGeorge's Syndrome, an endocrine condition.

The institution has also been a leader in organizational developments. We are the only pediatric hospital in the country that developed a multi-hospital system, and we in fact developed a multi-hospital system to defray the costs of providing care to the indigent children located within the depressed area of North Philadelphia.

We are also involved with several other area hospitals to develop a prepayment program, a means of providing care in a more lower cost but still quality way to medicaid recipients. We are working with several medical schools and the Department of Pediatrics of the Temple School of Medicine to consolidate medical programs and have one center to provide pediatric education, research and delivery systems.

The program I want to discuss with you today is really a program that will help St. Christopher's be a model of innovative and cost-effective health care delivery. It is a new hospital we will build that will, in fact, utilize all of the current and evolving energy research and development technologies.

For instance, we are talking about smart glass, window glazing, cooling storage, heat recovery, et cetera. We are going to be the only facility in the country implementing these kinds of technologies in the design and operation of our facility.

What we want to test is the applicability of these techniques to see if they can, in fact, be used on a broad-based and a wide-scale basis. If they can be used effectively, it will lower the cost of health care, which is so important to all citizens of these United States.

So, in conclusion, I would say to you, members of the committee, Mr. Chairman, that St. Christopher's desires to, in fact, establish a cost-effective, energy-efficient program that can be used to test these theories and evolving technologies, that can lower the cost of the energy-using hospitals, and indeed lower the overall costs of health care, enable us to remain an economic anchor within North

Central Philadelphia, and certainly provide a means of replicating what we learn in other medical care facilities throughout these United States.

Thank you for your time. I will respond to any questions that you may have.

[The statement of Mr. Bland follows:]

MR CALVIN BLAND

ST. CHRISTOPHER'S HOSPITAL FOR CHILDREN

TESTIMONY BEFORE

APPROPRIATIONS SUBCOMMITTEE
ON ENERGY AND WATER DEVELOPMENT

US HOUSE OF REPRESENTATIVES

APRIL 16,1986

Mr. Chairman and Members of the Subcommittee, my name is Calvin Bland. I am the Executive Director of St. Christopher's Hospital for Children, located in Philadelphia, Pennsylvania. I appear before you today to testify on behalf of a Medical Center of Technology and Energy Design at St. Christopher's Hospital for Children. First, I would like to express my appreciation to this Committee for affording me the opportunity to testify.

St. Christopher's Hospital for Children, located in one of the poorest areas in the country, is a premier medical institution and a leading center for education and research in pediatric health care. St. Christopher's began in 1875 as a nonprofit, non-sectarian dispensary for sick children living in North Philadelphia. The Hospital's primary mission has always been to provide quality health care to its patients, regardless of their ability to pay. Today, the Hospital is a highly specialized regional referral center, providing care to children from the Tri-State Region of Pennsylvania, New Jersey, and Delaware. The 146-bed medical center admitted over 6,000 sick children and provided over 140,000 ambulatory care visits in 1984. Additionally, it continues to function as the "family doctor" for the low-income children of North Philadelphia.

The Hospital's annual budget is in excess of $40 million, and it employs over 1000 persons.

During the past century, St. Christopher's has been noted for numerous innovations in child health care. In recent decades, it has become the major regional center for renal dialysis, solid organ transplantation, cardiac diagnosis and surgery, cystic fibrosis and many other tertiary referral services. Formal research programs are being conducted in areas such as carrier detection in cystic fibrosis, childhood hypertension in patients with renal disease, cancer therapy, child diabetes and juvenile rheumatoid arthritis, as well as multiple administration of childhood vaccines.

St. Christopher's has served as the Department of Pediatrics for the Temple University School of Medicine since 1947. Presently, all members of the full-time medical staff hold faculty appointments at the Medical School. Each year, over 75 pediatric, dental and surgical residents and specialty fellows receive specialized training in caring for children at St. Christopher's.

St. Christopher's has taken aggressive and creative steps to maintain its commitment to the indigent children of its local community while maintaining its status as an outstanding regional children's medical center at the cutting edge of clinical medicine. The following are four examples.

In 1980, St. Christopher's formed United Hospitals, Inc., a non-profit organization, which acquired three proprietary community hospitals. These hospitals were converted to nonprofit status, and surplus operating revenues have been used to broaden the base of support for St. Christopher's.

Along with three other major healthcare institutions in Philadelphia, St. Christopher's has formed Health Partners, a voluntary, prepaid health plan. This program, in conjunction with contracts from other health maintenance organizations, will represent a major investment for St. Christopher's in alternative, cost-effective methods of delivering care.

In December, 1984, St. Christopher's Hospital and 32 community organizations formed the "Coalition to Support St. Christopher's, forging a partnership of the Hospital and its local community dedicated to the revitalization of their severely deteriorated urban neighborhood and the improvement of health care in their community. The coalition has the strong support of the Mayor of the City of Philadelphia and provides a potential model for other hospitals, universities and major institutions located in depressed communities.

Lastly, St. Christopher's intends to consolidate three pediatric residency training programs into one program at one site-- the new St. Christopher's Medical Center. This consolidation will result in cost savings, reduction in both residency and faculty positions, and consolidation of inpatient pediatric services. The merger would bring together the academic, clinical, and research strengths of three schools to further improve the quality of patient care, education, and research. When achieved, this program will represent the first consolidation of three medical school training programs in the country.

St. Christopher's plans to construct a new medical facility which will utilize innovative and cost-effective health delivery systems in order to meet the health care needs and improve the health status of the children in its community and the region.

At the same time, St. Christopher's new Medical facility will be a unique center for energy technology and will assist in the development of longer-term energy use options. Energy efficient construction, operation and maintenance have been greatly overlooked in many healthcare facilities. However, a significant cost savings can be realized by reducing facilities' energy consumption through energy efficient design. The St. Christopher's Medical

Center will serve as a model for health care institutions across the country of ways to utilize the valuable results of energy technology research and development efforts.

Mr. Chairman, I appear before you today because I believe that construction of the St. Christopher's Medical Center is a project worthy of consideration for funding by this Committee. According to the American Hospital Association, if energy consumption were reduced by 25%, the resulting savings could be $1 billion annually for the health-care industry. Many new technologies for energy consumption are presently in the developmental stages of production and are available for application in hospital facilities. Research has led to developments in window glazing, cooling storage, heat recovery, cogeneration, daylighting and other lighting technologies. However, the final loop has yet to be completed, for no healthcare facility has incorporated these various technologies and there has been no demonstration of their potential contribution to energy efficiency.

The Medical Center at St. Christopher's will serve as a national model for energy-efficient hospital design. The Center will utilize the results of energy research efforts by incorporating these technologies into a facility which will serve as the final development stage in the research and development effort. Research data from the utility technologies used at St. Christopher's will be shared with hospitals and municipalities across the country, encouraging and setting the trend for future centers of energy research technologies.

Mr. Chairman, I know we are all aware of the current impetus throughout the Nation for fiscal responsibility, balancing budgets and reducing government expenditures. However, the St. Christopher's Hospital for Children new Medical Center meets the challenge facing the country today as we seek to perform better at less cost. The new Center will better serve, at a lower cost, the health-care needs of the children of Philadelphia and the tri-state region--needs which have not decreased over time. The new Center will continue to serve as the economic anchor in an otherwise economically depressed region of the country, providing jobs and income to the citizens of the city. And, the new Center will reduce the energy consumption taken from our dwindling energy resources as it puts to use the fruits of long and arduous research and development efforts into new utility technologies.

Mr. BEVILL. That was a very fine statement.

Obviously, the project has merit. We will certainly be working with the Chairman, Mr. Gray, in trying to be of some help to you.

Mr. BLAND. Thank you, Chairman Bevill.

WEDNESDAY, APRIL 16, 1986.

INDIANA PROJECTS

WITNESS

HON. PETER J. VISCLOSKY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF INDIANA

Mr. BEVILL. Our good friend and colleague, Congressman Visclosky, is here. We will be glad to hear from you.

Mr. VISCLOSKY. Mr. Chairman, I appreciate the opportunity to appear before the subcommittee and also the privilege of testifying before my colleague from Indiana, Mr. Myers.

I have prepared testimony which I would like to enter for the record and read briefly from it, and then avail myself of any questions you have.

Mr. BEVILL. Without objection your prepared statement will be made part of the record.

Mr. VISCLOSKY. Mr. Chairman, I am here essentially to testify regarding the Army Corps of Engineers' budget as it applies to Northwest Indiana and its 1987 fiscal year.

In short term, I believe three immediate areas need to be addressed by the subcommittee and considered for funding. First, the direction of $180,000 to the Army Corps to allow it to complete its continuing planning and engineering work on the Indiana shoreline as it directly relates to a long-term beach nourishment program.

The Corps has estimated the total cost of the study is $215,000, of which the Corps has used $107,000. The Corps needs an additional $108,000 to complete this project.

Most importantly, this project precedes a long-term program included in the omnibus water bill in the House, now in conference.

Secondly, the direction of an additional $750,000 to the Corps for continued work on maintaining and operating the Burns Waterway Harbor in Burns Harbor, Indiana. The current budget of the Army Corps for fiscal year 1987 recommends funding at $1,108,000, but in order to reach full maintenance and operating capacity the Corps would require an additional $750,000.

Finally, the direction of $100,000 for the Army Corps to begin a preliminary study for a lake demonstration and clean-up project for Lake George in Hobart, Indiana; and that part of the lake on Deep River in Lake Station, Indiana. This funding would allow the Corps to begin to gather field data and examine the range of issues involved in cleaning the lake to meet requirements of the Clean Water Act.

These projects are of interest not only to the communities involved but to all the residents of Northwest Indiana.

As a member of the House Public Works and Transportation Committee, and the Subcommittee on Water Resources, I have successfully worked to include projects in the omnibus water bill, H.R. 6 and S. 1567. I am cautiously optimistic that through careful judgment, House and Senate conferees will have an opportunity to present the Administration with a fair and equitable measure that will provide the necessary assistance to improve and develop the nation's water infrastructure. With your cooperation, we can also provide assistance in the short term to complete these projects mentioned above.

I appreciate the opportunity to appear before you today. Thank you for this consideration.

[The statement of Mr. Visclosky follows:]

TESTIMONY OF
THE HONORABLE PETER J. VISCLOSKY, M.C.
BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON
ENERGY AND WATER DEVELOPMENT

APRIL 16, 1986

I AM HONORED TO APPEAR BEFORE THE DISTINGUISHED MEMBERS OF THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT TODAY. I APPEAR BEFORE YOU TO PROVIDE TESTIMONY ON REQUESTS FOR APPROPRIATIONS FOR FISCAL YEAR 1987 AS THEY PERTAIN TO THE U.S. ARMY CORPS OF ENGINEERS AND PROJECTS LOCATED IN THE FIRST CONGRESSIONAL DISTRICT OF INDIANA.

THE FIRST CONGRESSIONAL DISTRICT IS COMMONLY CHARACTERIZED AS THE STEEL PRODUCTION CENTER OF THE UNITED STATES AND THE WORLD. WHAT MANY DO NOT KNOW IS THAT WITHIN THE INDUSTRIAL LANDSCAPE OF THE AREA EXIST 45 MILES OF NATURAL SHORELINE ALONG LAKE MICHIGAN, INCLUDING A NATIONAL LAKESHORE.

HISTORICALLY, THE U.S. ARMY CORPS OF ENGINEERS HAS HAD A STRONG ROLE IN OPERATING AND MAINTAINING NUMEROUS HARBORS ON LAKE MICHIGAN AND MONITORING OTHER NATURAL WATERSHED AREAS IN THIS REGION. IN ADDITION TO ITS ROLE IN OPERATING AND MAINTENANCE, THE CORPS HAS CONDUCTED NUMEROUS STUDIES TO HELP

ALLEVIATE THE SEVERE CIRCUMSTANCES CAUSED BY FLOODS AND SHORELINE EROSION. FOR EXAMPLE, DURING THE PAST YEAR, THE LAKE MICHIGAN SHORELINE HAS BEEN DEVASTATED BY RISING LAKE LEVELS AND CONTINUED EROSION. IN ONE PARTICULAR AREA ALONG THE LAKE, A SCENIC ROAD WHICH PROVIDES AREA RESIDENTS ACCESS TO THEIR HOMES WAS NEARLY WASHED AWAY. WITH THE ASSISTANCE FROM THE U.S. ARMY CORPS, LOCAL RESIDENTS ALONG THE SHORELINE HAVE RECEIVED EMERGENCY ASSISTANCE TO PREVENT FUTURE DESTRUCTION OF THIS AREA.

TODAY, I APPEAR TO BRING TO YOUR ATTENTION SPECIAL REQUESTS TO CONSIDER AS YOU DEVELOP THE FISCAL YEAR 1987 APPROPRIATIONS BILL. I BELIEVE THAT THE CORPS SHOULD CONTINUE TO RECEIVE ADEQUATE FUNDING TO ALLOW IT TO PERFORM ITS JOB AND TO RESPOND TO EMERGENCY SITUATIONS.

IN THE SHORT TERM, I BELIEVE THREE IMMEDIATE AREAS NEED TO BE ADDRESSED BY THE SUBCOMMITTEE AND CONSIDERED FOR FUNDING. THEY ARE:

> THE DIRECTION OF $108,000 TO THE ARMY CORPS TO ALLOW IT TO COMPLETE ITS CONTINUING, PLANNING AND ENGINEERING (CP&E) WORK ON THE INDIANA SHORELINE AS IT DIRECTLY RELATES TO A LONG-TERM BEACH NOURISHMENT PROGRAM. THE CORPS HAS ESTIMATED THAT THE TOTAL COST OF THE STUDY IS

$215,000, of which the Corps has used $107,000. The Corps needs an additional $108,000 to complete this project. Most importantly, this project precedes the long-term program which is currently included in the omnibus water bill before the House and Senate Conference.

The direction of an additional $750,000 to the Corps for continued work on maintaining and operating the Burns Waterway Harbor in Burns Harbor, Indiana. The current budget of the Army Corps for Fiscal Year 1987 recommends funding at $1,108,000, but in order to reach full maintenance and operating capacity, the Corps would require an additional $750,000.

The direction of $100,000 for the Army Corps to begin a preliminary study for a lake demonstration and clean-up project for Lake George in Hobart, Indiana, and that part of the Lake on Deep River in Lake Station, Indiana. This funding would allow the Corps to begin to gather field data and examine the range of issues involved in cleaning the lake to meet requirements of the Clean Water Act.

These projects are of interest not only to the communities involved, but to all the residents of my District. The comple-

TION OF THE STUDY ON THE INDIANA SHORELINE WOULD ENABLE THE CORPS TO HAVE ITS FINAL BEACH NOURISHMENT PROGRAM DESIGNED IN ADVANCE OF THE AUTHORIZATION OF THE $7.9 MILLION PROTECTION PROJECT CONTAINED IN THE WATER BILL. IN ADDITION, THE INCREASED FUNDING FOR THE BURNS HARBOR FACILITY WOULD ENABLE THE CORPS TO OPERATE AND MAINTAIN THE HARBOR IN AN EFFICIENT MANNER AND ALLOW IT TO COMPLETE CONSTRUCTION OF BREAKWATER BERMS IN THIS AREA. FINALLY, ALLOWING THE CORPS TO BEGIN A STUDY ON THE LAKE GEORGE PROJECT WOULD ENABLE THE CORPS AND THE COMMUNITIES TO WORK TOGETHER IN ANALYZING THE MOST AMENABLE MEANS TO RESOLVE THE PROBLEM AND TO CLEAN THE LAKE. THIS PROJECT IS ALSO INCLUDED IN THE HOUSE WATER BILL, WHICH CALLS FOR A COMPREHENSIVE CLEAN-UP AND LAKE RESTORATION PROGRAM IN THE AMOUNT OF $5.2 MILLION.

I WOULD ALSO LIKE TO MENTION THAT THESE TYPES OF PROJECTS SERVE A VITAL ROLE IN THE FUTURE DEVELOPMENT AND SECURITY OF THE LOCAL ECONOMY IN NORTHWEST INDIANA. MANY OF THESE PROJECTS WILL ALSO WORK TO PRESERVE THE ENVIRONMENT AND ALLOW THE PUBLIC TO HAVE ACCESS TO THESE AREAS. IN ADDITION, PROJECTS LIKE THESE WILL ALLOW MORE PEOPLE TO OBTAIN EMPLOYMENT OPPORTUNITIES, THE GREATEST CHALLENGE WE FACE IN THE FIRST DISTRICT.

AS A MEMBER OF THE HOUSE PUBLIC WORKS AND TRANSPORTATION

COMMITTEE AND THE SUBCOMMITTEE ON WATER RESOURCES, I HAVE SUCCESSFULLY WORKED TO INCLUDE PROJECTS IN THE OMNIBUS WATER BILL (H.R. 6 AND S. 1567). I AM CAUTIOUSLY OPTIMISTIC THAT THROUGH CAREFUL JUDGMENT, HOUSE AND SENATE CONFEREES WILL HAVE AN OPPORTUNITY TO PRESENT THE ADMINISTRATION WITH A FAIR AND EQUITABLE MEASURE THAT WILL PROVIDE THE NECESSARY ASSISTANCE TO IMPROVE AND DEVELOP THE NATION'S WATER INFRASTRUCTURE. WITH YOUR COOPERATION, WE CAN ALSO PROVIDE ASSISTANCE IN THE SHORT TERM TO COMPLETE THESE PROJECTS MENTIONED ABOVE.

I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY. THANK YOU FOR THIS CONSIDERATION.

Mr. BEVILL. We appreciate your fine statement. We will certainly work with you to do the best we can.

Mr. VISCLOSKY. Thank you very much.

Mr. MYERS. I want also to join my Chairman in thanking Pete for appearing before the committee. A region which we call in Indiana a unique character, it is the highest steel producing area in the United States today and one of the leading, of course, in the world. They have modernized and kept competitive. Particularly, it has a high water problem on the lakes.

Has that had any impact besides the erosion?

Mr. VISCLOSKY. It really has. The erosion is not only caused by the high water levels, but also because of the physical structures man has placed in the lake. It has inhibited our ability to turn the economy of Northwest Indiana around.

While we have done better than those in Western Pennsylvania or Eastern Ohio, we are still suffering.

The other thing we would like to do, Mr. Myers, Mr. Chairman, is to find other job alternatives. Unless we do address both our flooding problems and erosion problems, we are not going to be successful in that endeavor. These are of special economic importance to us, as well.

Mr. MYERS. I believe I am correct in saying Lake Michigan is at an all-time high in water level.

Mr. VISCLOSKY. It is, and it appears it will continue to rise from its current level.

Mr. MYERS. It is like having water go into your bathtub when the drain doesn't open up. This is literally what is happening in the Midwest and the Great Lakes. At the present time, they haven't found any way of alleviating or relieving this problem of more water coming into the lakes. It is rising at an unprecedented rate right now. No one knows, unless we have an extreme drought—which we can't afford to have, either—what is going to happen. We didn't have a large amount of snowfall this year to thaw out.

Mr. VISCLOSKY. We have a very serious problem.

Mr. MYERS. Thank you for your testimony, Pete.

Mr. VISCLOSKY. Thank you very much.

WEDNESDAY, APRIL 16, 1986.

DOE—CENTER FOR INFORMATION TECHNOLOGY

WITNESS

FREDERICK M. BOHEN, SENIOR VICE PRESIDENT, BROWN UNIVERSITY

Mr. BEVILL. Dr. Bohen, we will be glad to hear you.

Mr. BOHEN. Thank you, Mr. Chairman.

Mr. Chairman, members of the subcommittee, I am Fred Bohen, Senior Vice President of Brown University. I am grateful indeed for this opportunity to come here today to bring you up to date on the progress we are making at Brown University on the construction of the Center for Information Technology.

As you know, the new center will house the faculty, teaching, research, and service activities that will enable Brown to make a regional and national contribution in the area of information technology.

All of us at Brown greatly appreciate your support. Our rapid progress to date, and plans for moving ahead rapidly to complete this project, would not have occurred in the absence of the Federal financial assistance which has been committed to us through the strong support we have had from Chairman Bevill and the other members of this committee.

Let me take a few minutes to tell you where we are. Upon learning of the Federal commitment of $10 million to our project early last fall, we accelerated our own timetable to assure that the project would proceed efficiently. We are on schedule at this time.

If the Federal grant of $5 million in fiscal year 1986 is received on schedule, and the follow-on appropriation of $5 million is approved by the Congress this year, we anticipate no difficulties in completing the project on time as planned.

We are engaged in the following activities on the schedule indicated, to move this project to completion in a timely fashion.

First, we have worked hard to fulfill the planning requirements of the Department of Energy. We have completed the various planning, budget and assurance of compliance forms required, making submissions to the department on December 3, 1985, December 19, 1985 and March 31, 1986.

Late this month, we expect our architects and construction manager to complete the critical conceptual design report, the final submission required before a grant award can be signed and transmitted.

My colleagues and I were helped by the constructive planning meeting of the Chicago Regional Office of the Department of Energy, which we attended in early December 1985. We have found department personnel constructive, facilitative, and highly professional in working with us on this project.

In late February, we selected the Cambridge Seven Associates as the architects, and Gilbane Building Company as construction manager. From the day these two firms were selected, we have asked this project be given their full and immediate attention. These excellent organizations have fully met our expectations.

In December 1985, Brown entered the capital markets to borrow the funds required to complement the Federal grant and complete the project on time. Further, the University is engaged in active fund raising from the private sector to equip the center with the most up-to-date computing and related equipment available for our purposes. We have received equipment donations amounting to $19.6 million toward the original goal of $26.3 million for equipment.

Fourth, construction will proceed on a fast-track basis. Key dates are, as I indicated earlier, later this month completion of the conceptual design report by our architect and construction manager; in May 1986, anticipated completion of all requirements of the Department of Energy for the initial grant, and we hope for receipt of the grant award at that time; from June to August, through the summer of 1986, preparation of the site for this facility; and in September and October, the initiation of construction; early spring 1988, the completion of construction.

We have planned a formal ground-breaking ceremony, Mr. Chairman, for Saturday, October 11, 1986, on the occasion of our fall meeting of our corporation, which is also homecoming weekend.

Mr. **Myers**. Who do you play?

Mr. **Bohen**. I believe it is Princeton.

We hope you might honor us with your presence on that important date at Brown.

I would like to conclude with some observations of the value of this project to Brown and, we hope, to the nation. The Center for Information Technology will give Brown the opportunity to make major contributions in several areas.

One is basic research in computer science and its application to many other areas, including energy research, where Federal-sponsored research support has been prominent at Brown for many years.

Second is applied research on the applications of new technologies to the processes of education and research.

Third is the production of computer scientists at several different levels of expertise.

And, fourth, is the education of students in many areas to provide leadership to government, business, and other institutions as we move into the information age.

Thus, Brown will contribute to strengthening the nation's capacity to manage and capitalize on the age that we are entering.

In a relatively short time, this project has gained great momentum. However, without the support of this committee we would still be at the drafting table looking for the help to get started. The confidence of this committee, the Chairman, and the leaders of the Congress has moved the tantalizing progress of the National Center at a great private university close to reality.

For that, and in anticipation of our crucial interest and support, we at Brown are very grateful.

[The statement of Mr. Bohen follows:]

TESTIMONY

by

Frederick M. Bohen
Senior Vice President
BROWN UNIVERSITY

to

Subcommittee on Energy and Water Development of the
Committee on Appropriations
U.S. HOUSE OF REPRESENTATIVES

Washington, D.C.

April 16, 1986

I. Introduction

Mr. Chairman and members of the Subcommittee.

I am grateful, indeed, for this opportunity to come here today to bring you up to date on the progress we are making at Brown University on the construction of the Center for Information Technology.

As you know, the new Center will house the faculty, the teaching, research, and service activities that will enable Brown to make a regional and national contribution in this area.

All of us at Brown greatly appreciate your support. Our rapid progress to date, and plans for moving ahead rapidly to complete this project simply would not have occurred in the absence of the federal financial assistance which has been committed to us through the strong support we have had from Chairman Bevill and the other members of this committee.

We fully expect that this joint effort between the federal government, Brown and private enterprise will lead to important breakthroughs in basic and applied research, particularly in the applications of the technology to truly innovative teaching and methods of advanced scholarship and research.

II. Project Progress

In the months since you approved a federal commitment of $10 million and an initial appropriation of $5 million in the current fiscal year to this project, we have made considerable progress.

Upon learning of the federal commitment to our project early last fall, we accelerated our own timetable to insure that the project would proceed efficiently. We are on schedule at this time. If the federal grant of $5 million in FY 1986 is received on schedule, and the follow-on appropriation of $5 million is approved by the Congress this year, we anticipate no difficulties in completing the project on time as planned.

We are engaged in the following activities on the schedule indicated, to move this project to completion in a timely fashion.

1. We have worked hard to fulfill the planning requirements of the Department of Energy. We have completed the various planning, budget and assurance of compliance forms required, making submissions on December 3, 1985, December 19, 1985 and March 31, 1986.

   Late this month we expect our architects and construction manager to complete the Conceptual Design Report, the final submission required before a grant award can be signed and transmitted.

   My colleagues and I were helped by the constructive planning meeting of the Chicago Regional Office of the Department of Energy, which we attended on December 3, 1985. Overall, we have found Department personnel constructive, facilitative and highly professional.

2. Architect and Construction Contractors selected. In late February we selected the Cambridge Seven Associates, Inc. as the architects and Gilbane Building Company as construction

manager for this project. From the day they were selected, we have required that this project be given their full and immediate attention. They have complied with enthusiasm.

3. In December 1985, Brown entered the capital markets to borrow the funds required to complement the federal grant and complete the project on time. Further, the University is engaged in active fund raising from the private sector for support to equip the Center with the most up to date computing equipment available for our purposes. We have received equipment donations amounting to $19.6 million toward the original goal of $26.3 million for equipment.

4. Construction will proceed on a fast-track basis. Key dates are:

April 1986	Completion of Conceptual Design Report by architect and construction manager.
May 1986	Anticipated completion of all requirements for initial grant, and receipt of grant award commitment from the Department of Energy.
June- August 1986	Site preparation begins.

September-- October 1986	Construction begins.
Spring 1988	Completion of construction.

A formal ground-breaking ceremony is being planned for Saturday, October 11, 1986 on the occasion of our fall Trustees meeting and Homecoming Weekend. We hope, Mr. Chairman, that you and members of the Committee might honor us with your presence on that important date.

III. The Center for Information Technology and Brown University

I would like to conclude with some observations of the value of this project to Brown and we hope to the nation. Brown's charter of 1764 states that Brown shall turn out graduates who are "duly qualified for discharging the offices of life with usefulness and reputation." Brown believes that its resources as a private university must be managed for the public good. We see this project in that light.

The Center for Information Technology will give Brown the opportunity to make major contributions in several areas:

a. Basic research in computer science and its application to many areas, including energy research, where federal sponsored research support has been prominent at Brown over the last generation.

b. Applied research on the applications of the new technologies to the processes of education and research.

c. The production of computer scientists.

d. Education of students in many areas to provide leadership to government, business and other institutions in our society as we move into the information age.

Thus, Brown will contribute to strengthening the nation's capacity to manage and capitalize on the information age. We believe that the demands made by the new technologies at home and abroad requires the nation to find new ways of providing the leadership that is key to our success in a new age.

Brown is able to bring to this endeavor its extensive, internationally recognized experience and accomplishments in computing. We welcome the opportunity that comes from our participation in a three way partnership with the federal government and private industry.

In a relatively short time, this project has gained great momentum. However, without the support of this committee, we would still be at the drafting tables looking for help to get started. The confidence of the Committee, the Chairman, and the leaders of this great institution has moved the tantalizing possibilities of a national center at a great private university very close to reality. For that, and in anticipation of your continued interest and crucial support, we are very grateful.

Mr. **Bevill**. Very good, Doctor.

As you know, Congress approved our bill for your center, and then the $5 million additional will be available. We will take care of you.

Thank you very much.

Mr. **Myers**. You are certainly to be congratulated for the amount of money you have generated from local contributions.

Mr. **Bohen**. I appreciate that, Mr. Myers. But it all depended very much on having the Federal Government step up—be a critical catalyst for the facility. We are very grateful this committee saw the virtues of doing that.

Thank you very much.

Wednesday, April 16, 1986.

CLEVELAND HARBOR

WITNESSES

HON. LOUIS STOKES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

HON. MARY ROSE OAKAR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. **Bevill**. We have Congressman Louis Stokes and Congresswoman Oakar with us.

Your prepared statements will be made part of the record. You may proceed as you wish.

Mr. **Myers**. We serve on another committee together. I haven't been in good attendance. Tom has kept us busy over here.

Mr. **Bevill**. We are anxious to get your testimony on the Cleveland Harbor. We are very interested in that.

As you know, our good friend Jim Howard, who is back there, Chairman Howard, has taken care of the authorization on it several times in the House. It is going to be in conference now. So, we are going to follow up with it.

We will need your testimony here to support the committee's position.

Mr. **Stokes**. Thank you very much, Mr. Chairman, Mr. Myers.

With your permission, I will lead off. I certainly want to reiterate what you have already said and express the appreciation of both myself and Congresswoman Mary Rose Oakar for the consideration that this subcommittee has always given us.

You are absolutely correct. Our colleague, Mr. Howard, has certainly been very considerate of our needs and previous requests to his committee. So, we are indebted to you for the type of consideration that we have always been given on behalf of our projects.

The purpose of our appearance before you today is to request your continued assistance in moving the Cleveland Harbor Project forward. Specifically, we are requesting your approval for the remaining portion of the $36 million needed to undertake urgent repair and rehabilitation of Cleveland's port facilities.

In requesting your support of continued Federal funding for the Cleveland Harbor, we recognize the fiscal pressures facing the subcommittee. We know that you have before you a number of major funding requests, and we understand that you must assign greatest funding priority to projects of greatest national significance. Therefore, I would like to bring you up to date on the role that Cleveland's port plays in the national economy.

Within a single overnight truck trip of the Port of Cleveland are located: 14 of the top markets of the U.S. and Canada; 63 percent of U.S. manufacturing shipments; 66 percent of U.S. manufacturing establishments; 79 percent of the top 500 U.S. industrial corporate headquarters; 75 percent of the population of Canada and the U.S.; 55 percent of the U.S. population; 55 percent of the U.S. households; and 56 percent of this country's buying income.

Clearly, the Federal investment in the Cleveland Harbor is in the national interest and will return many times its value to the U.S. economy.

The importance of Cleveland's port to national economic recovery and to national efforts to increase the competitiveness of American products overseas are further underscored by the following statistics: For the fourth consecutive year, shipments through the Port of Cleveland showed a marked increase over the previous year;

In 1985, total tonnage through the Port of Cleveland increased 19 percent, despite almost a month of inactivity due to two shutdowns on the St. Lawrence Seaway;

The Cleveland port is also developing significant export activity. For example, almost 72,000 tons of scrap products, such as billet ends, destined for China and other foreign markets, were shipped out through the Port of Cleveland last year. This is 72,000 tons of scrap export activity in 1985 compared to almost no activity in 1984.

As you can see, Mr. Chairman and members of the subcommittee, the Cleveland port is making substantial progress on tonnage; but the next step forward rests squarely on essential capital improvements. Rehabilitation of commercial navigation facilities on the Cuyahoga River and at the Cleveland Harbor is a key part of an overall strategy to ensure that Northeast Ohio fully participates in national efforts to compete successfully in a global economy.

Let me close by reiterating that the Cleveland Harbor has made serious efforts to be able to move raw materials, components and products in and out of Cleveland cheaply and efficiently. But we cannot do it alone.

The State of Ohio, the City of Cleveland, and the private sector have already made financial commitments to this undertaking. State and local participants are prepared to act now on a cost-sharing agreement for the project, which will exceed $65 million in total cost. I urge you to continue the prudent investment of Federal resources in the Cleveland Harbor Improvement Project. I stand ready to provide any information you or your staff may request.

Thank you for your time and your attention.

I yield to my colleague, Mary Rose Oakar.

Mr. **Bevill**. Mary Rose, we are glad to have you.

Ms. **Oakar**. Mr. Chairman, thank you so much. It is indeed a pleasure to appear once again before your excellent committee.

And, with your distinguished Minority leader on the committee, you are some of the most admired Members of Congress.

I have the pleasure of working closely with another member of the Appropriations Committee, my colleague and friend from Cleveland, Congressman Stokes.

It is indeed a pleasure to be here to testify before the subcommittee about the Cleveland Harbor Project. I know, Mr. Chairman, you have been hearing about this for nine years. We are still working on it.

I would like to follow up on Congressman Stokes' testimony by providing an update of the progress——

Mr. **Bevill**. I am sure that persistence and patience will pay off.

Ms. **Oakar**. I hope so. Things are working out slowly but surely. We are working on it.

I want to join my colleague in joining the request for the remaining portion of the $36 million approved for Cleveland Harbor in the 1985 Supplemental Appropriations to undertake urgent repair and rehabilitation of our port facilities.

Since passage of the 1985 Supplemental Appropriations bill, we have continued to work closely with local and State entities to ensure efficient and coordinated efforts. Two months after passage of the Supplemental Appropriations bill for fiscal year 1985, the Governor of Ohio steered an $8.4 million—along with the legislature—Ohio Department of Natural Resources allocation as the State of Ohio participation in the comprehensive Cleveland Harbor Project.

Local foundations have contributed private sector funds for one of the elements of the project, and the City of Cleveland is preparing a funding contribution of its own. Initial efforts have also been to secure the cooperation of county and State Highway Departments to coordinate their participation in repair of low-level swing and lift bridges over the navigation channel of the Cuyahoga River portion of Cleveland Harbor.

We have also worked closely with the House Public Works and Transportation Committee—I am delighted to see the guardian angel of that committee, the Chairman, in back monitoring our very words at this moment; he has been extraordinarily cooperative—the Senate Environment and Public Works Committee and the Corps of Engineers to obtain appropriate language in H.R. 6, S. 1567, and the conference bill and report.

As part of the effort, I met with the District Corps of Engineers commander to arrange a floor colloquy that was delivered on the House Floor on November 6, 1985. Senator Glenn, for his part, discussed the details of the Cleveland Harbor Project during Senate Floor consideration of S. 1567. We are including a copy of Senator Glenn's statement, as well as our own statements during consideration of H.R. 6. I would like to put those in your record.

Mr. **Bevill**. Without objection, they will be made part of the record.

[The information follows:]

Mr. MOYNIHAN. The Senator from New Mexico is no doubt going to have to leave the floor as he has so many other duties, but before he does, I say to the Senate that this bill would not be on the floor were it not for him. He has been characteristically modest. He is that. The things he was describing as to the process of development of this bill were ideas and measures which he initiated. He was the energy behind them. If I joined with him, it was at his invitation.

He describes very clearly and dramatically the hearing where a financier, Joel Price, vice president of Rotan Mosle, Inc., testified, "You want to know how to decide how many 60-foot coal ports to build? Find out who will pay part of the cost of building them."

Our problem is very simple, classic economics. Ports were free goods, and as free goods, they were wasted. In time however, the competition for these free goods became so great that by the beginning of this decade we, in the United States, had the clear imprimatur to produce at least three 60-foot coal ports. We needed to have access to a European market that the Australians and South Africans were preparing for with supertankers. We had a system in place that, by the year 2030, would have given us twenty 60-foot ports but we needed them 40 years sooner. The decade is almost over but it is not too late, and we are starting to make the right decisions. It is to be wished that one could speak loudly enough to be heard in the other body, so that they would hear what the Senator from New Mexico has just said. We have 181 major projects in this bill, and that is enough. Cost sharing is the absolute minimum condition. Absent that, there will be no legislation, and we will lose another decade. I have put 10 years in on this bill, for my part. But perhaps others must have the experience of how to get nothing, which is to ask for too much.

Mr. DOMENICI. Mr. President, I know that the Senator from Ohio wants to speak, and I will be one moment.

This has been a very interesting 13 years, so far as the Senator from New Mexico is concerned. I vividly recall that just before the Senator from New York [Mr. MOYNIHAN] came to the committee, Mr. Gravel, of Alaska, was chairman of the subcommittee.

I am not embarrassed to say that I had only one legislative success of any significance in the first 8 or 9 years I was here, and that had to do with the inland barges paying a fuel tax. That was a very historic event. I was able to say that I passed at least one major piece of legislation, as that worked its way through here.

I should like to share with Senators how that happened. It is interesting to put in on the record. We were having a hearing about 10 o'clock in the morning on lock and dam 26. I am from New Mexico. Obviously, we do not have any inland waterways.

We were discussing how we ought to go on the users paying for a little of lock and dam 26, and somebody made a slight mistake at the witness table. They were from the lock and dam area.

The decorum of the committee room was broken when the person stood up and said: "Who are you?" He said this to me. "What business is it of yours as to what we do with our lock and our dam and our river?"

I thought, "Isn't that interesting?" I said: "What do you mean?"

He said,

> Well, you shouldn't have anything to say about it. We know what we're doing, and we're going to decide how we're going to run these. And you all are going to pay for them. Just as you have been paying for them for a long time. I kind of wish, young man, you would mind your own business.

That set the stage for a very interesting 3 years for me. I had a great deal of fun. I enjoyed immensely the final day when that mode of transportation started paying a little tax on the fuel, so as to defray a little of the taxpayers' burden.

I note that in this bill there is a continuation of that process, with another tax on those using it going into effect in future years. It is not what we have desired, because it is not sufficient to pay the costs.

However, I do commend those in the inland waterway business—in the industry, those who represent them here—for the good common sense to add some more to that very minimal tax, and that is provided in this bill.

I was part of that compromise. I said they should have a lot more, because that is not enough. I, too, compromised.

I think it is a very good sign for the future of the inland waterways that those who use them will at least reimburse the taxpayers of America by a small portion, 10 or 15 percent of the cost.

Mr. ABDNOR. Mr. President, I was in the House at the time the Senator is speaking of, when all this started. Now I have a better understanding of it.

I used to hear about the Senator from New Mexico, who was trying to change the whole history of water development and about terrible "user charges." I wondered what kind of mean, ornery individual he was. I found out what the Senator was like when I came to the Senate. Thre is no person in this Chamber who deserves greater credit for bringing this about, even though many of its provisions do not go as far as he would like. This bill is still a great step forward in water development for America, and we all thank him for supporting it.

Mr. DOMENICI. I thank the Senator.

Mr. GLENN. Mr. President, I realize that bringing up any new amendments would be futile in this environment. I realize that the floor managers of the bill have made it clear that they will strongly oppose any floor amendments to the bill, adding projects that have not cleared the whole Corps of Engineers process. Realizing what the situation is, I will not offer amendments for the matters about which I wish to speak briefly. But I hope that with what I put forwrd here, the conferees on this bill will look favorably upon the House position in conference on these two measures—which, I might add, comply completely with what the distinguished Senator from New Mexico and the distinguished Senator from New York just discussed about users paying a portion, and local political entities, be they State, county, municipal, or whatever, sharing in the burden of whatever the project may be.

The two items I wish to bring to the attention of the floor managers and other Senators and those who will be conferees on this bill are two that affect my home State of Ohio, and they are two in which the State and local communities are willing to share in the burden.

First, I wish to discuss briefly the Cleveland Harbor project. It is a commercial navigation project.

The components stress the importance of river, as well as harbor, actions necessary to correct navigation hazards, and foster safe, profitable commercial shipping through the Port of Cleveland. I urge my colleagues to adopt the House provision in conference.

The Cleveland Harbor project, for which $36 million in Army Corps of Engineers participation is requested, consists of the following actions:

First. Deepening and widening of the East Harbor entrance. This provision, for $4.3 million, is included in the leadership amendment to the bill and has a chief's report from the Corps of Engineers.

Second. Bulkheading and other necessary repairs to pier 34.

Third. Sheeting, bulkheading, and necessary repairs to docks 20, 24, 32, and 36.

Fourth. Construction of a basin south of pier 34, with related protective structures and approach channels.

Fifth. Removal or correction of navigation impediments at specific bridges crossing the navigation channel of the Cuyahoga River, and correction of "bow thruster" and other infrastructure problems at Cleveland Harbor.

Sixth. Report of Cuyahoga River bank—sheeting, bulkheading.

Seventh. Sheeting, bulkheading, and necessary repair of approach to the U.S. Coast Guard Station in Cleveland Harbor.

Total cost of the Cleveland Harbor project is $65.3 million, with participation, which was just discussed on the floor, as follows: Army Corps of Engineers, $36 million; State of Ohio, $8.45 million; local and other, $20.85 million.

A Federal investment of $36 million is fully appropriate and in the national interest when you consider the importance of the Cleveland area to our Nation's economy. The Cleveland area is the ninth largest industrial market in shipments nationwide, shipments for the seven-county Cleveland area average more than $33 billion annually, and two-thirds of U.S. industrial production is located within 600 miles of Cleveland.

I also note that startup funds for the Cleveland project were included in the 1985 supplemental appropriation bill. The House water resources bill, H.R. 6, authorizes up to $36 million for Cleveland Harbor.

The Cleveland project has the unanimous support of the public and private sector. This support for the project is backed up with financial commitments from all parties. Local and State participants are prepared to act on a cost-sharing agreement for the project as soon as we give them the go-ahead in this authorization bill.

The components of the Cleveland Harbor project have been studied by the Corps of Engineers and are referenced in various corps documents related to Cleveland Harbor and the Cuyahoga River. In fact, some bridge-related corps recommendations date back to 1937.

The Cleveland project includes action by the corps to prepare a safe harbor basin, at a total cost of $5.1 million. Federal share for corps action on the basin is only $3.7 million. The need for such safe harbor is referenced in both corps and Coast Guard studies related to the frequency of sudden and severe weather on Lake Erie. The State of Ohio has committed funds to develop the recreational potential of the land surrounding the basin—corps participation is limited to construction of the safe harbor basin, related protective structures, and approach channels only.

Certainly any shipping facilities of the size and economic importance of Cleveland Harbor warrants a $36 million Federal sharing of the cost or investment, as I view it.

So I urge my colleagues when they consider the House provision in conference that they look with favor upon this because I believe, it is one that is most worthwhile and one that benefits us nationally as well as just the State of Ohio and the Cleveland area.

Mr. President, the second element of consideration for the conference that I wish to address briefly, is the Lake Milton Dam near Youngstown, OH. The Lake Milton Dam is in Mahoning County. Shortly, unless emergency repairs are done, that dam must be breached and the lake drained, and that lake has been there many, many years. The lake must be drained unless these emergency repairs are done.

The rehabilitation of this dam is of utmost importance to the area around Youngstown and Mahoning County.

I do not have to recount here today the economic difficulties that have beset that part of our State, that part of our Nation, as our steel mills have gone down and some single-industry towns have come upon hard times.

Mr. President, this is a beautiful recreation area. It is a tourist attraction. Other businesses and economic development can occur around that area which can help the northeast Ohio recovery.

The total cost of repairs for the dam is estimated as $6.75 million but, lest the managers of the bill take too much umbrage to that, let me say that there is significant State cost sharing for this project. The State of Ohio will contribute $4.3 million or 63 percent of the cost of the repairs. What we need is Federal authorization for the gap of only $2.5 million.

Repairing the dam is cost effective. The estimated cost of reconstructing a structure of this size we estimate would be more than $100 million today.

In the House bill legislation is provided to take care of this problem. There is a loan in the House bill. We hope that that could be perhaps changed into a grant in the conference committee. But this is a beautiful area. It is of benefit to the economically devastated area of Youngstown and northeastern Ohio.

Mr. President, I urge my colleagues and hope the conferees on the conference committee that we will be in touch with will look with great favor on the legislation already in the House bill for this Lake Milton Dam as well as the Cleveland Harbor project that I have already mentioned.

Mr. President, today we take an important step forward in continuing the development of this Nation's waterways and flood control efforts. With the passage of S. 1567, the Senate has ensured that America will develop and maintain a modern infrastructure capable of handling the demands of our modern industrial society. And I am proud to say that Ohio will share in the benefits of this far-reaching and long overdue program.

S. 1567 contains funding for a number of projects of great importance to my State of Ohio. Maumee Bay State Park will receive $15.8 million for shoreline protection. The potential benefits of this expenditure are several: Industrial development, increased job opportunities in a depressed area, expanded recreation facilities, and environmental protection. As such, the project will substantially enhance the quality of life in the area on the south shore of Lake Erie near Toledo.

This bill also authorizes $256 million to replace and modernize the Gallipolis locks and dam. I sponsored legislation to authorize this work several years ago and I am pleased that our efforts are finally paying off. The existing facilities are obsolete after nearly 50 years of service and present a serious danger to commerce on the Ohio River. Even when the locks are operating at full capacity, Gallipolis is a bottleneck. When there is an accident, which is a common occurrence, the delays can last for days or even weeks. The funding for this work will correct a worsening condition on the Ohio River transportation corridor and benefit the commerce of several States.

The Lorain Harbor will receive $5.5 million for necessary improvements. Lorain has suffered from severe economic distress in recent years. The proper maintenance of Lorain Harbor, along with the development of the Lorain Small Boat Harbor which we funded in October of last year, will help improve the economy of the Lorain area.

The Cleveland Harbor will be authorized to receive $4.3 million for deepening and widening of the East Harbor entrance. These improvements are necessary to correct navigation hazards and foster safe, profitable commercial shipping through the Port of Cleveland.

This bill provides additional authorization for the comprehensive plan for the development of the Ohio River Basin. This project was originally authorized in 1936 and has proven extremely valuable in building a viable Ohio River transportation system. I am pleased to see that this important work will continue.

This legislation includes severval important flood control projects for Ohio. The citizens of southerwestern Ohio will be happy to see a substantial Federal effort to control the flooding of the Miami and Little Miami Rivers. S. 1567 sets aside $23.3 million to provide relief of those who have been plagued with property damage resulting from high waters on these rivers over the years.

In addition, the citizens of North Chillicothe, OH, will receive $10.7 million to control the flooding from the Scioto River. The bill also includes authorization for a flood control project at the Hocking River, at Logan and Nelsonville, in the amounts of $7.7 million and $8.0 million respectively.

As the cochairman of the Great Lakes Task Force for the Northeast-Midwest Senate Coalition, I also want to note that S. 1567 contains several provisions of significance to the Great Lakes region. The legislation authorizes five Great Lakes harbor improvement projects, including Lorain Harbor and Cleveland Harbor in Ohio; Duluth-Superior Harbor, in Minnesota and Wisconsin; Grand Haven Harbor, in Michigan; and Monroe Harbor, in Michigan.

Title VIII, "Navigation Taxes," includes an important provision for Great Lakes shipping interests; Rebate of St. Lawrence Seaway tolls paid to the St. Lawrence Seaway Department Corporation. Also included in title VIII is a provision directing the

Secretary of State, in consultation with the Secretary of Transportation, to initiate negotiations with the Canadian Government with the objective of reducing or eliminating all tolls on the international Great Lakes and the St. Lawrence Seaway. The ultimate elimination of seaway tolls, both Canadian and American, would make the ports of the Great Lakes region competitive, for the first time, with ports on the other three U.S. coastlines. These two provisions in title VIII constitute an important first step toward elimination of seaway tolls.

S. 1567 also establishes a harbor maintenance trust fund for the purpose of providing operation and maintenance for commercial channels and harbors. It authorizes 100 percent of the eligible operation and maintenance costs of the St. Lawrence Seaway Development Corporation to be appropriated out of this harbor maintenance trust fund.

Mr. President, we have waited a decade for a new water resources authorization bill. I urge my colleagues to adopt this legislation.

Mr. MOYNIHAN. Mr. President, may I thank the distinguished Senator from Ohio for his very cogent and careful remarks.

It is the case that we have not been able to accept any substantive amendments but we will go to conference and we will have carefully in mind his cogent thoughts.

Mr. ABDNOR. I assure the Senator we will give it every consideration in the conference.

Mr. GLENN. I thank the Senator very much.

Mr. METZENBAUM. Mr. President, I want to urge the chairman of the committee and the ranking democratic member to support in conference the project to repair Milton Dam in Youngstown, OH.

Milton Lake has been a prime recreation area for the city of Youngstown and the surrounding region for more than 60 years.

Unfortunately Milton Dam is in a state of serious disrepair. A 1980 report of the Army Corps of Engineers concluded that an "emergency situation may ultimately result" if steps were not taken to repair it.

Following a new study of the dam last month, the Ohio Department of Natural Resources concluded that the dam is unsafe, and recommended that the dam be breached and the lake drained.

This would be a tragedy for Youngstown and the entire region.

Mr. President, the economy of Youngstown is severely depressed. The city simply does not have the $6.7 million needed to repair Milton Dam. As a matter of fact, the mayor of Youngstown says that the city cannot even afford to pay back a loan if such a loan to repair the dam is provided.

H.R. 6, the House passed measure would loan Youngstown 80 percent of the funds needed to repair the dam. Recognizing that a loan would not save Milton Dam, the State of Ohio recently offered to provide a $4 million grant to help pay for the needed repairs. That still leaves Youngstown $2.6 million short.

Mr. President, I was prepared to offer an amendment to provide the additional needed funds. However, the bill managers have indicated that no amendments for new projects would be accepted.

Therefore, I would hope that the conferees see fit to provide the additional $2.6 million grant needed to complete the repair project. I believe the State of Ohio clearly has demonstrated its commitment to solving this crucial problem. It is a worthwhile investment, and many people in Youngstown are depending on it.

AMENDMENT NO. 1710

(Purpose: To make certain technical and other modifications to the bill)

Mr. ABDNOR. Mr. President, I send an amendment to the desk and ask for its immediate consideration.

The PRESIDING OFFICER. The clerk will report the amendment.

The bill clerk read as follows:

The Senator from South Dakota [Mr. ABDNOR] (for himself, Mr. STAFFORD, Mr. BENTSEN, and Mr. MOYNIHAN) proposes an amendment numbered 1710.

Mr. ABDNOR. Mr. President, I ask unanimous consent that the reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

(Amendment 1). On page 3, line 1, after the word "reimbursed", insert the following: "during each such fiscal year".

(Amendment 2). On page 5, line 7, delete the figure "$250,000" and insert in lieu thereof "$5,000,000".

(Amendment 3). On page 5, line 20, after the word "Representative" insert the following: "after July 1, 1967,".

(Amendment 4). On page 65, after line 5, insert the following and number accordingly:

"Sec. (a)(1) Congress is concerned about the impact that the century-high water level of the Great Lakes is having on shoreline along the Great Lakes and connecting channels.

"(2) Congress recognizes scientific findings that indicate the level of the Great Lakes will continue to rise if, as expected, the current long term weather cycle of cooler temperatures and higher precipitation prevails.

"(b) The Secretary, in cooperation with the National Oceanic and Atmospheric Administration, the Federal Emergency Management Agency, the International Joint Commission, and other appropriate Federal, State, and local agencies and the private sector, is authorized to conduct a study of shoreline protection and beach erosion control policy and related projects of the Secretary, in view of the current situation and long-term expected increases in the levels of the Great Lakes. Such study shall include, but is not limited to—

"(1) a study to determine the magnitude and extent of current and expected future shoreline erosion on the Great Lakes and connecting channels occurring as a result of high water levels. The study shall examine the impacts of the long term cold weather cycle on lake levels and shoreline damage. The study shall also examine the relationship of shoreline damage to the regulation of outflows from Lake Superior and Lake Erie in accordance with approved regulation plans of the International Joint Commission;

"(2) an economic and hydrologic analysis to determine whether changes in the inflows and outflows of the existing structures may be desirable to reduce shoreline damages, and whether further regulations of the outflow of Lake Erie may be warranted to achieve better regulation of the water levels of the Great Lakes;

"(3) a summary of the legal and institutional impacts of rising lake levels on riparian lands; and,

"(4) recommendations for new or additional criteria for Federal participation in shoreline protection projects along the Great Lakes and connecting channels.

"(c) Within three years after the date of enactment of this Act, the Secretary shall transmit the studies prepared pursuant to subsection (b) of this section, together with supporting documentation and the recommendations of the Secretary, to the Committee on Environment and Public Works of the Senate and Committee on Public Works and Transportation of the House of Representatives.

"(d) For the purposes of this section, there is authorized to be appropriated to the Secretary for the fiscal year ending September 30, 1987, or thereafter, the sum of $3,000,000, such sum to remain available until expended.

"Sec. . The Secretary is directed to include in the feasibility study of Sunset Beach Harbor, Bolsa Chica Bay, California, an assessment of the feasibility of non-Federal cost sharing for the Sunset Beach Harbor project, utilizing the provisions of section 215 of this Act, in consultation with the appropriate non-Federal sponsors: *Provided*, That no such assessment shall be considered as an alternative to any non-Federal cost sharing otherwise required during the period of construction of any possible project. The assessment under this section will examine whether, and to what extent, the provisions of section 215 of this Act can be used by the non-Federal sponsors of the Sunset Beach Harbor project to support non-Federal cost-sharing for this project.

"Sec. The project for navigation, Cape Charles City Harbor, Virginia, authorized by the River and Harbor Act approved March 2, 1945 (59 Stat. 15), is modified to provide that the local interests shall not be required—

"(1) to provide bulkheads, or

"(2) to reserve berthing space for general public use, along a great distance of the shoreline than such bulkheads are provided or such berthing space is reserved on the date of the enactment of this Act.

"Sec. The Secretary is directed to expedite the hydroelectric power studies of the Red River Basin Comprehensive Study, Arkansas, Texas, Louisiana, and Oklahoma (authorized by Public Law 98-63), with a particular view of investigating the feasibility of adding hydroelectric power generating facilities at the Tuskahoma Lake, Oklahoma, project.".

(Amendment 5). On page 102, line 11, delete the semicolon and insert in lieu thereof the following: "; *Provided*, That after the date of enactment of this Act, the Secretary shall not submit to Congress any proposal for the authorization of any water resources project that has a hydroelectric power component unless such proposal contains the comments of the appropriate Power Marketing Administrator designated pursuant to section 302 of the Department ments of this project and are obligations which should be fulfilled by the corps. The decision by the corps to remove this component from the project in its letter of transmittal was an administrative decision done without the advice from local sponsors and inconsistent with the intent of the legislation.

As the corps report indicates, the recreation and riparian habitat needs of the area will be well served by the inclusion of this component and are certainly justified under the responsibilities of the corps in this regard, and I urge the corps to meet the intent of the H.R. 3670/H.R. 6 as it relates to the Redbank-Fancher Creeks project.

Mr. STOKES. Mr. Chairman, will the gentleman yield?

Mr. BROWN of California. I yield to the gentleman from Ohio.

(Mr. STOKES asked and was given permission to revise and extend his remarks.)

Mr. STOKES. Mr. Chairman, I rise in support of the legislation. I commend the subcommittee chairman and the committee for this excellent bill.

I would like to express my appreciation to Congressman Bob Roe for his diligent efforts on H.R. 6, the Water Resources Conservation, Development, and Infrastructure, Improvement and Rehabilitation Act. I especially appreciate the attention which the chairman has given to the inclusion of the Cleveland Harbor improvement project in the bill. The activity surrounding the development of the Cleveland Harbor and lakefront is an integral part of the continuing revitalization of the economy of metropolitan Cleveland. Ohio and Cleveland public officials, the private sector and the Army Corps of Engineers have worked closely together and are in agreement that the work on the Cleveland Harbor needs to be undertaken. This work will create important jobs for Clevelanders.

H.R. 6 authorizes $36 million for the deepening and widening of the east harbor entrance, bulkheading and other necessary repairs for Pier 34 and approach channels and necessary protective structures for mooring basins for transient vessels, as well as other work to be recommended by the Army Corps of Engineers. The approval of this bill moves us one giant step forward in a Federal, State and private cooperative effort to bring the Cleveland Harbor improvement project to fruition.

I especially appreciate the colloquy between Congressman ROE and Congresswoman MARY ROSE OAKAR to clarify the intent of Congress with regard to the development of this project. I would like to reiterate my understanding that H.R. 6 provides to the Army Corps of Engineers the necessary authorization for the sheeting, bulkheading, and related improvements to Dock 24, Dock 32 and Dock 36, as well as the removal of navigational impediments at specific bridges, the correction of "bow thruster" problem areas and other infrastructure problems at the Cleveland Harbor. As I understand it, it is the committee's intention that these activities be undertaken by the Army Corps of Engineers and, further, that the Corps of Engineers work with Ohio and local officials in permitting local funds spent on the basin south of Pier 34 to be part of the local match required for all of the project components comprising the Cleveland Harbor improvement project.

Ms. OAKAR. Mr. Chairman, will the gentleman yield?

Mr. BROWN of California. Mr. Chairman, let me point out that I am yielding to all these Members on the assumption that they are supporting my amendment, and, of course, I yield to the gentlewoman from Ohio.

Ms. OAKAR. Mr. Chairman, I have been with the committee so far.

Mr. Chairman, if the gentleman will yield, I would like to engage in a very brief colloquy that we have waiting to have for some time with the distinguished chairman, and I rise in support of the bill as well.

I thank the gentleman for yielding to me for a colloquy, and I would ask that he yield to the distinguished chairman also.

Mr. BROWN of California. I certainly yield to the gentleman from New Jersey.

Ms. OAKAR. I would first like to commend the chairman of the Water Resources Subcommittee and the members of the Public Works Committee for their outstanding work on this vital legislation. I am grateful for the committee's attention to the navigation and infrastructure needs of Cleveland's Harbor, for which $36 million is authorized in H.R. 6.

Mr. Chairman, I would like to clarify the committee's intent with respect to the project. Is the committee's intent to provide for the deepening and widening of the east entrance to the Cleveland Harbor?

Mr. ROE. That is the intent.

Ms. OAKAR. Is it also the committee's intention that bulkheading and other repairs to pier 34 be performed to remove potential navigation hazards, and that cost-sharing be consistent with provisions relating to navigation?

Mr. ROE. The gentlewoman is correct.

Ms. OAKAR. Is the committee's intent to direct the Corps of Engineers to work in conjuction with the State of Ohio and local authorities in the construction of the basin south of pier 34, particularly in allowing local funds spent on the basin to be part of the local share of funding for all work elements in the authorization?

Mr. ROE. The gentlewoman is correct.

Ms. OAKAR. Does the committee recognize the purpose of this basin for mooring smaller vessels that seek safe harbor in the event of dangerous weather that can occur suddenly in Lake Erie, and is the local non-Federal cost to be consistent with the formula established for shallow ports, those between 14 and 20 feet deep?

Mr. ROE. That is the intent of the committee.

Ms. OAKAR. Finally, Mr. Chairman, does the authorization also permit sheeting, bulkheading, and related improvements to Dock 20, Dock 24, Dock 32 and Dock 36, and along the navigational channel of the Cuyahoga River, as well as the removal of navigational hazards at specific bridges, the correction of "bow thruster" problems, repair and building of breakwalls, and other related navigational and infrastructure problems at the Cleveland Harbor area as will be identified by local authorities working in cooperation with the Corps of Engineers and this committee, subject to the provisions of section 103?

Mr. ROE. The gentlewoman from Ohio is again correct.

Ms. OAKAR. I thank the gentleman for yielding. I thank him for his courtesy and leadership. I thank the gentleman from California very much as well.

Mr. BROWN of California. Mr. Chairman, if there are no other Members who wish to have me yield in order to endorse my amendment, I will proceed.

(Mr. BROWN of California asked and was given permission to revise and extend his remarks.)

Mr. BROWN of California. Mr. Chairman, I also ask unanimous consent that in the event that my amendment is not properly designated because I have not followed all of the changes that have already been made this morning, that it be properly referenced to the Santa Ana River mainstem project in California which it intends to knock out of the bill.

Mr. CHAIRMAN. The Chair is aware that the amendment is properly drated.

Mr. BROWN of California. If the amendment is properly drated, Mr. Chairman, then I have no request.

Mr. CHAIRMAN. The Chair recognizes the gentleman from California [Mr. BROWN].

Mr. BROWN of California. Mr. Chairman, I support this bill, and I intend to vote for it. I also support the Santa Ana River project, and if I knew what it was, I would vote for that. Unfortunately, this bill purports to authorize a project which has not yet been approved.

We were further ahead in the design and approval of this project 3 years ago than we are today, and I would like to indicate on this chart what the situation is. We have a very significant flood control problem in California on the Santa Ana River. The river originates in the mountains, flows through my district, which is indicated in green here, flows on down across the boundary into Orange County, and goes on out to the ocean.

Now, 3 years ago the Corps of Engineers had approved the all-river plan which included the Mentone Dam, located at this point. I supported that. I still support it. All of the public agencies support it. What happened is that after the project went to the next level in the Department of the Army, Ms. **Oakar**. In response to these various actions, the Corps of Engineers is working with us on a cost-sharing agreement for the Cleveland project and indicates it expects to complete such an agreement with the City of Cleveland in a few weeks. We, in turn, have agreed to provide non-Federal share at the levels called for in S. 1567 or the eventual formulas worked out in the conference on H.R. 6.

Of course, we are hoping that H.R. 6 prevails.

Mr. **Myers**. We are, too.

Ms. **Oakar**. The subcommittee's assistance at this time in earmarking funding for the Cleveland Harbor improvements for fiscal year 1987 is needed to assure that funds provided by the State of Ohio and Cleveland interests are matched with Corps of Engineers action as soon as possible. Such an appropriation will allow all parties to begin action on the overall project on a task-by-task basis. As repairs are delayed, costs escalate. Hence, a task-by-task approach helps to contain the Federal cost of the project.

My colleague outlined the importance of Greater Cleveland's Harbor to our country's and our community's transportation network. In fact, the Cleveland Harbor Project is an important component of Cleveland's overall development strategy. The subcommittee will recall that Cleveland hovered on the brink of bankruptcy less than 10 years ago. Since then, with no financial assistance from Federal or State governments, the city has restored a sound fiscal base and now has a bond rating of B-A-A.

Since 1980, over $1 billion in private sector investment has taken place within one mile of Cleveland Harbor. New businesses and jobs are being created. Established businesses are experiencing growth. All of this success will be squandered if we cannot move materials and products quickly and efficiently in and out of the Cleveland area.

Experts confirm that freight-moving capacity, especially the capacity to efficiently transfer between modes, is having an increasing impact on the ability of U.S. firms to compete in national and international markets. For this reason, we in Ohio have invested millions of our own dollars to upgrade, rehabilitate and coordinate highway, railroad, air freight and waterborne traffic capacities.

The Ohio House of Representatives recently passed a bill to encourage the best use of the State's Lake Erie shoreline. The Ohio Department of Transportation is undertaking work to assure our State's waterborne freight potential is fully utilized.

The action this subcommittee took last year to include the Cleveland Harbor Project in the 1985 Supplemental Appropriations bill provided an essential boost to Northeast Ohio's multimodal transportation program. That is why we are so grateful to you for doing all you have done in the past.

It is playing a major role in our economic recovery strategy. We now need your assistance once again in taking the next step—getting work started at Cleveland Harbor.

You know, Mr. Chairman, we hear a lot about national security. We are all very supportive of retaining our national security. I think national security is very, very much involved with how we treat our infrastructures, our water, and our domestic abilities so that we can compete. To me, this is part of the whole national security strategy.

We ought to place the same kind of priorities on these kinds of issues, in my judgment, that we sometimes place in other areas. We really need your help.

We really thank you for all the work you have done in the past. I am delighted to have had the opportunity to testify before this terrific committee.

Mr. **Bevill**. Thank you both for the very good statements. We appreciate the fine work both of you do here in the Congress, not only for Cleveland and Ohio, but for the nation. We appreciate both of you. Certainly, we are going to work with you two on this, and cooperate with you. We are very supportive of this project.

I think that is a good point you made about defense. We sometimes overlook the economy and the inland waterways and other modes of transportation that help so much from a defense standpoint.

Mr. **Myers**. I have a comment.

We thank you for your very fine testimony.

The accomplishment that Cleveland Harbor has made here, it is a remarkable recovery. I can remember when, Tom, you and I first came to Congress, the lake was supposed to be dead and gone. But it has come back now stronger than ever, ecologically as well as economically. We are glad to see that.

Ms. **Oakar**. Thanks to you.

Mr. **Myers**. Speaking again as a member of this committee, we are under attack quite frequently. Even though you don't have something in a bill, you have always been supportive.

Through the years, we have learned who our friends are. We appreciate the two of you having the time. I know it has not been popular back in your district, maybe; but we appreciate your support.

Ms. **Oakar**. Thank you.

We do take a national perspective on the issue. Congressman Stokes has borne the brunt of the burden sometimes. I have been joining him. He really is one of our heroes.

Mr. **Bevill**. We could name a few waterways that exist in this country today that would not exist without Congressman Stokes. Thank you so much.

Mr. **Stokes**. It was a pleasure. Thank you.

WEDNESDAY, APRIL 16, 1986.

NEW MEXICO PROJECTS

WITNESS

HON. BILL RICHARDSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW MEXICO

Mr. **Bevill**. Next we have a good friend and colleague, Congressman Bill Richardson, here.

Chairman Howard, we will be with you next, in about five minutes. We are sorry to keep you waiting.

Mr. RICHARDSON. Thank you.

Mr. BEVILL. Bill, we are delighted to hear from you. You may put your statement in the record.

Mr. RICHARDSON. Thank you, Mr. Chairman.

First of all, my thanks to you and Mr. Myers for the great support that you have given New Mexico in our water resource projects. Thanks also to your staff, who have always been most responsive.

Mr. Chairman, I know time is of the essence for you. I would like to briefly summarize the request that I am making to this committee.

Two of the projects for which I am requesting appropriations, the Taos Community Ditch Project and the Rio Chama Community Ditch Project, would be done by the Bureau of Reclamation. Three of the projects—the Hernandez Flood Control Study, the San Miguel Acequias Study, and the Rio Grande Levee—would be done by the Army Corps of Engineers. And, the Los Alamos National Laboratory buyout would be done with Department of Energy funding.

I understand that a similar buy-out arrangement has been worked out by DOE and Oak Ridge, Tennessee in the amount of $41 million. The Los Alamos Buy-out needs $21.8 million.

The main priority, Mr. Chairman, is a project this committee has already been helping me with in terms of the Bureau of Reclamation study, the Acequias study, the ditches which date back centuries, the ditches which provide cultural benefits for the ranchers and farmers who depended upon them for generations.

Mr. Chairman, for this reason, I would like to respectfully request $3.45 million for these community ditch projects.

Once again, I thank this committee. I thank Mr. Myers, Mr. Bevill, and your staff once again.

I know time is of the essence. I think I have given my speech in under one minute.

[The statement of Mr. Richardson follows:]

TESTIMONY OF THE HONORABLE BILL RICHARDSON
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APRIL 16, 1986

MR. CHAIRMAN, HONORABLE MEMBERS OF THIS COMMITTEE;

THANK YOU FOR THIS OPPORTUNITY TO TESTIFY IN FRONT OF YOUR COMMITTEE ON FY'87 APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT. IN THESE TIMES OF DECREASING AVAILABILITY OF FEDERAL FUNDS, YOUR WORK IN THIS COMMITTEE PLAYS AN INCREASINGLY IMPORTANT ROLE IN ENSURING THAT THE NEEDS OF OUR COMMUNITIES ARE MET. I AM TESTIFYING HERE TODAY IN ORDER TO BRING TO YOUR SPECIAL ATTENTION SOME PRESSING NEEDS OF SOME OF THE COMMUNITIES I REPRESENT HERE IN CONGRESS. I REALIZE THAT DECISIONS ON THE FUNDING OF PROJECTS ARE BECOMING MORE AND MORE DIFFICULT AS WE ARE ALL FACED WITH DECREASING NUMBERS OF DOLLARS WITH WHICH WE ARE TRYING TO MEET SEEMINGLY-INCREASING NEEDS. I HAVE, THEREFORE, MADE A CONCERTED EFFORT TO BRING TO YOUR ATTENTION PROJECTS IN THE THIRD CONGRESSIONAL DISTRICT OF NEW MEXICO WHICH ARE INDEED PRESSING.

TWO OF THE PROJECTS FOR WHICH I AM REQUESTING APPROPRIATIONS -- THE TAOS COMMUNITY DITCH PROJECT, AND THE RIO CHAMA COMMUNITY DITCH PROJECT -- WOULD BE DONE BY THE BUREAU OF RECLAMATION. THREE OF THE PROJECTS -- THE HERNANDEZ FLOOD CONTROL STUDY, THE SAN MIGUEL ACEQUIAS STUDY, AND THE RIO GRANDE LEVEE -- WOULD BY DONE BY THE ARMY CORPS OF ENGINEERS. AND, THE LOS ALAMOS NATIONAL LABORATORY "BUYOUT" WOULD BE DONE WITH DEPARTMENT OF ENERGY FUNDING.

THROUGHOUT NORTHERN NEW MEXICO THERE IS AN IRRIGATION DITCH SYSTEM KNOWN AS THE ACEQUIAS, OR COMMUNITY DITCHES, WHICH DATES BACK SEVERAL CENTURIES. THESE IRRIGATION SYSTEMS PROVIDE IMPORTANT ECONOMIC, CULTURAL AND HISTORICAL BENEFITS FOR THE MANY RANCHERS AND FARMERS WHO HAVE DEPENDED ON THEM FOR GENERATIONS. THE ACEQUIAS ARE AN ESSENTIAL PART OF THE LIVES AND LIVELIHOODS OF MANY OF THE PEOPLE IN THE THE THIRD CONGRESSIONAL DISTRICT OF NEW MEXICO.

MANY OF THESE ACEQUIAS ARE IN NEED OF REHABILITATION AND RESTORATION. THE PRIMARY PROBLEMS WITH THE EXISTING ACEQUIAS ARE DETERIORATION OF EXISTING STRUCTURES; THE LACK OF OR DETERIORATION OF DIVERSION STRUCTURES; THE LACK OF CONTROL STRUCTURES; SEDIMENTATION AND VEGETATIVE GROWTH. REHABILITATION OF THE ACEQUIAS WOULD ELIMINATE MUCH OF THE REQUIRED EXTENSIVE MAINTENANCE ON THE SYSTEMS. IT WOULD REDUCE THE LOSS OF WATER. IT WOULD ALSO IMPROVE IRRIGATION WATER MANAGEMENT.

COMMUNITY DITCH USERS ORGANIZE INTO ACEQUIA ASSOCIATIONS TO OVERSEE THE USE AND MAINTENANCE OF THE SYSTEMS. THESE ASSOCIATIONS, DATING BACK TO THE 17TH AND 18TH CENTURIES AS AN INSTITUTION, REMAIN AN IMPORTANT PART OF THE IRRIGATION ECONOMY AND CULTURAL HERITAGE OF NORTHERN NEW MEXICO. REHABILITATION AND MODERNIZATION OF THE ACEQUIAS GREATLY REDUCES THE HOURS OF LABOR NOW REQUIRED TO IRRIGATE THE LAND AND TO MAINTAIN THE SYSTEMS. IMPROVEMENTS INCLUDE THE INSTALLATION OF MORE PERMANENT DIVERSION STRUCTURES AND HEADGATES, WASTEWAYS, ARROYO SIPHONS, AND PIPE OR CONCRETE LINING OF THE DITCHES. BECAUSE MUCH OF THE IRRIGATION UNDER THESE COMMUNITY DITCHES IS BASICALLY SUBSISTENCE FARMING, THE COMMUNITY DITCH ASSOCIATIONS NEED TECHNICAL AND FINANCIAL ASSISTANCE IN ORDER TO UNDERTAKE NECESSARY REHABILITATION.

THE FIRST APPROPRIATION REQUEST WHICH I WOULD LIKE TO ASK YOUR CONSIDERATION OF AND POSITIVE ACTION ON IS $3,250,000 FOR THE TAOS COMMUNITY DITCH PROJECT. THIS PROJECT INCLUDES THE DITCHES AND IRRIGATED AREAS ASSOCIATED WITH THREE STREAMS -- THE RIO GRANDE DEL RANCHO, THE RIO CHIQUITO, AND THE RIO FERNANDO DE TAOS. A REHABILITATION AND RESTORATION NEEDS ASSESSMENT STUDY HAS ALREADY BEEN DONE ON THIS ACEQUIA SYSTEM BY THE BUREAU OF RECLAMATION. THIS ADDITIONAL MONEY WOULD BE USED BY THE BUREAU OF RECLAMATION TO CARRY OUT THE NECESSARY REHABILITATION OF THESE ACEQUIAS, AS IDENTIFIED IN THEIR STUDY.

THE SECOND PROJECT I WOULD LIKE TO REQUEST YOUR ATTENTION TO IS A CORPS OF ENGINEERS FLOOD CONTROL APPRAISAL REPORT FOR HERNANDEZ, NEW MEXICO. THIS REPORT WOULD BE TO ASCERTAIN THE EXTENT OF THE PROBLEMS CAUSED BY FLOODING OF THE RIO CHAMA AND TRIBUTARIES IN THE VICINITY OF HERNANDEZ, AND WOULD REQUIRE AN APPROPRIATION OF $50,000.

THIRD IS THE RIO CHAMA COMMUNITY DITCH PROJECT WHICH NEEDS $100,000 FOR A BUREAU OF RECLAMATION STUDY OF THE PROBLEMS AND NEEDS OF THE APPROXIMATELY 20 DITCHES ALONG THE RIO CHAMA FROM ABIQUIU TO HERNANDEZ. LIKE THE OTHER ACEQUIAS, THE RIO CHAMA COMMUNITY DITCHES PLAY AN INTEGRAL ROLE IN THE LIVES OF THE PEOPLE OF THE LOCAL COMMUNITIES, AND LIKE THE OTHER ACEQUIAS, THESE DITCHES ARE EXPERIENCING PROBLEMS WITH DETERIORATION AND DESTRUCTION. THE PURPOSE OF THIS STUDY IS TO EVALUATE THE NEED FOR DIVERSION DAM RECONSTRUCTION, HEADGATE REHABILITATION AND CHANNEL LINING.

FOURTH, THE SAN MIGUEL ACEQUIAS ON THE PECOS RIVER IN SAN MIGUEL COUNTY ALSO REALLY NEED AN ASSESSMENT OF THEIR STATUS AND NEED FOR REPAIRS. THIS STUDY, TO BE CONDUCTED BY THE ARMY CORPS OF ENGINEERS, WOULD COST $50,000.

THE FIFTH APPROPRIATION WHICH I RESPECTFULLY REQUEST YOUR CONSIDERATION OF REQUIRES DEPARTMENT OF ENERGY FUNDS. IN RECOGNITION OF THE SPECIAL NEEDS OF A COUNTY WHICH MUST SERVICE A LARGE FEDERAL FACILITY, LOS ALAMOS NATIONAL LABORATORY, LOS ALAMOS COUNTY CURRENTLY RECEIVES APPROXIMATELY $2 MILLION PER YEAR FROM THE DEPARTMENT OF ENERGY IN COMMUNITY ASSISTANCE FUNDS. THESE FUNDS HAVE BEEN PROVIDED TO LOS ALAMOS COUNTY SINCE 1955. IT HAS, HOWEVER, BECOME INCREASINGLY DIFFICULT FOR THE COUNTY TO SECURE THESE FUNDS ON AN ANNUAL BASIS. THE FUNDS ARE MUCH NEEDED, IN ORDER TO MAINTAIN THE SPECIAL LEVEL OF SERVICES REQUIRED BY THE LABORATORY.

THE COUNTY HAS BEEN NEGOTIATING A ONE-TIME "BUY-OUT" FROM DOE IN THE AMOUNT OF $21.8 MILLION. IT IS MY UNDERSTANDING THAT A SIMILAR ARRANGEMENT HAS BEEN WORKED OUT BY DOE AND OAK RIDGE, TENNESSEE, IN THE AMOUNT OF $41 MILLION. LOS ALAMOS COUNTY FEELS THAT THESE $21.8 MILLION IN FUNDS WILL ENABLE THEM TO MAINTAIN THE NECESSARY LEVEL OF SERVICES, PROVIDE THE COUNTY WITH ADDITIONAL FLEXIBILITY IN THE ADMINISTRATION OF ITS SERVICES AND ELIMINATE THE NEED TO FIGHT A COSTLY APPROPRIATIONS BATTLE ON A YEARLY BASIS. IN THIS REGARD, I AM RESPECTFULLY REQUESTING A $21.8 FY'87 APPROPRIATION IN ORDER TO ACCOMPLISH THIS "BUY-OUT" AND ELIMINATE THE NEED FOR CONTINUED FUNDS ON AN ANNUAL BASIS.

SIXTH, AND FINALLY, I WOULD LIKE TO REQUEST A $2 MILLION APPROPRIATION FOR THE RIO GRANDE LEVEE PROJECT FROM BERNALILLO TO BELEN. THIS CORPS OF ENGINEERS PROJECT NEEDS $2 MILLION TO COMPLETE THE DESIGN AND INITIATE CONSTRUCTION. APPROXIMATELY $1 MILLION OF PLANNING AND ENGINEERING MONEY HAS ALREADY BEEN SPENT BY THE CORPS OF ENGINEERS ON THE DESIGN OF THIS PROJECT, WHICH WOULD PROVIDE FLOOD CONTROL FOR A NUMBER OF THE COMMUNITIES IN MY DISTRICT. A $2 MILLION APPROPRIATION WOULD ALLOW THE CORPS TO FINISH THE DESIGN, AND BEGIN CONSTRUCTION ON THIS IMPORTANT FLOOD CONTROL PROJECT.

THESE SIX PROJECTS ARE MY REQUESTS FOR ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FY'87. THANK YOU VERY MUCH FOR GIVING ME THIS OPPORTUNITY TO TESTIFY TO YOUR SUBCOMMITTEE ON THESE IMPORTANT NEEDS OF THE THIRD CONGRESSIONAL DISTRICT OF NEW MEXICO. IF YOU NEED ANY ADDITIONAL INFORMATION, DO NOT HESITATE TO CONTACT ME. THANK YOU.

Mr. Bevill. We appreciate it.

Mr. Richardson. I hope that my testimony will contribute to my success in providing for the needs of my constituents.

Mr. Bevill. We appreciate the good work you do here and the support you have given our committee. We will work with you on that.

Mr. Myers. Thank you, Bill.

Wednesday, April 16, 1986.

NEW JERSEY PROJECTS

WITNESS

HON. JAMES J. HOWARD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. Bevill. Chairman Howard, we would be glad to hear from you.

Mr. Howard. Thank you, Mr. Chairman.

Mr. Bevill. Your prepared statement will be made part of the record.

Mr. Howard. Thank you very much, Mr. Chairman, Mr. Myers.

I have a very brief statement. I do appreciate having the privilege to appear before you today to request continued funding for an extremely important Army Corps of Engineers project in the Third Congressional District in New Jersey, which is known as the Sandy Hook to Barnegat Inlet Beach Erosion Control Project.

As you know, this authorized project is currently operating under a fiscal year 1986 appropriation of $1.5 million.

I am pleased to report to the committee of the good work that the Corps has already done with the funds previously appropriated for this project. For example, the Corps has already located the offshore borrow pits from which the sand will be taken to reconstruct the beaches. The Corps has also completed the topographical mapping of this project, which will help them to calculate storm damage prevention benefits; they have finished the storm search model, which will be used by the Corps to predict future storm surge levels; and, along the same line, a geological mapping of the project area is being completed, which is being used to analyze thousands of years of coastal and geological shifts. As you can see, this project is well on the way to fruition.

I would also like to note that the Corps has begun testing the strength and composition of the seawall which lines much of this project. While the actual repair of the seawall is the responsibility of the State of New Jersey, and represents their share of the costs of this project, the Corps wants to ensure that it is rebuilt to the proper specifications. This reconstruction is a necessary component of the Corps' beach restoration project.

I have been informed by the New York District Army Corps of Engineers that an appropriation of $2.3 million is needed in fiscal year 1987. Specifically, $1.3 million is needed to continue work on the first section of this project, the Sea Bright to Ocean Township reach, and $1 million is needed to begin the Advanced Engineering and Design for a second section, Asbury Park to Manasquan.

When completed, this project will provide the restoration and protection of three sections of the shore, from Sea Bright to Seaside Park, by the artificial placement of sand to widen the beach to a minimum width of 100 feet at an elevation of 10 feet above mean low water, and by construction of 23 new groins and the extension of 14 already existing groins in the Sea Bright to Ocean Township section.

With an appropriation of $2.3 million for next year, the Corps can continue to work on the engineering and economic studies that must necessarily be completed before beginning the actual project. I am sure you agree that on a project of this size, every effort must be made to ensure that the final project is as close as possible to a permanent solution.

Mr. Chairman, it was only a couple of years ago that a severe storm created a breach in the seawall that provides the only protection to the towns located at the site of this project, Monmouth Beach and Sea Bright. Thousands of people were evacuated at that time, and only a dramatic shift in the winds prevented severe damage. These towns will continue to stand in danger of future storm damage until this vital project is completed.

This beach erosion control project will also have a profound effect on the economy of my district. Erosion has seriously reduced the width of most beaches, thereby increasing the impact of storm damage on the shore. Because of this, many of the shore towms simply cannot provide sufficient recreational beach space to attract the tourists needed to maintain a healthy local economy.

Mr. Chairman, it is my hope that your Subcommittee on Energy and Water Development will agree with me that the Sandy Hook to Barnegat Inlet Beach Erosion Control Project must be completed in a timely manner. I am asking that the committee include $2.3 million in the fiscal year 1987 bill, along with the appropriate language so that this money can be made available for continued work on this project.

Mr. Chairman, Mr. Myers, I would also like to endorse the request, as my colleague Bill Hughes did yesterday, the request by the Administration for $6 million for the Barnegat Inlet itself. As you know, we have been here several times on that. It is a major inlet, the busiest boating inlet in the State of New Jersey, and the most dangerous. The reconstruction project has been needed for many, many years.

Although I had originally felt, and the committee felt, it should be a 100 percent Federal project because of the design deficiency conceded by the Corps, New Jersey offered 35 percent funding by the State. That contract was just recently signed. Instead of 100 percent, the Federal Government will be putting in 65 percent; the State, 35 percent.

It is a good cooperative effort. I want to thank you for all you are doing.

If I may, I would also like to say, speaking not for my own district, but for the committee, that the work that we do in the authorizing process could not come to fruition if we did not have a subcommittee like yours on the appropriations level. Of the many areas in which we authorize on appropriating committees, I don't know where any work as well as they do between our committees. That is not entirely because of the make-up of the jurisdictions; it is due to the caliber of our committee and the staff.

Mr. Myers. Both committees.

Mr. Howard. I don't want to say too much about my committee. They may want a raise.

Mr. Myers. Are we talking about staff?

Mr. Howard. In these Gramm-Rudman times, we give compliments instead of raises.

Mr. Bevill. We appreciate you, Chairman Howard. You have worked with us long and hard. You know, the same thing is true of our committee. We do enjoy a good working relationship.

On this Barnegat Inlet, I know this has been one that you have been very interested in. As a matter of fact, I think you had about five fatalities there, as I recall.

Mr. Howard. We had several fatalities there in the past few years. A high percentage of all passages of the whole State are in that inlet. There is tremendous traffic, and many deaths in the off-season.

Mr. Bevill. We will certainly work with you.

Wednesday, April 16, 1986.

GARRISON DIVERSION UNIT

WITNESS

HON. BYRON L. DORGAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH DAKOTA

Mr. Bevill. Our good friend and colleague, Congressman Dorgan is here. We are pleased to have you with us again.

Mr. Dorgan. Thank you, Mr. Chairman.

North Dakota has never asked for a sea wall or money to fix one, and never will. We have asked for money for appropriations for the Garrison Diversion Project.

I would like to, for the moment, describe to you where we are at this point.

The Garrison Project has been very controversial, and that probably even understates it. We attached, in 1984 by the Senate, a request for a special Garrison Commission to be formed. The commission met and made its recommendations, the opponents and supporters spent many months arguing about how those recommendations should be interpreted.

For the last year and a half, we have been negotiating, those sessions that resulted in a compromise. This compromise, which just recently passed in the form of an authorization bill by the full Interior Committee will probably be on the Floor of the House next week.

That compromise is agreed to by the National Audubon Society, the Nat'l Wildlife Federation, the North Dakota Wildlife Society, the Garrison Conservancy District, myself, the Governor, virtually everyone now buys into this compromise.

It shrinks the project substantially, makes some changes that are necessary in order to bring everyone into agreement. Canada now has no objections, so we have made substantial progress.

The present appropriation for this fiscal year was $41.3 million; that is, for Fiscal year 1986. That was mentioned with language that says the 41.3 will not be able to be spent unless an authorization bill is passed reformulating the unit.

The bill that has been now passed by the committee is a bill that will deem to have met the March 31 date, when it passes the House and the Senate, so will release the fiscal year 1986 money.

The Administration has requested $18 million for fiscal year 1987, and that money itself is to close out the project.

Clearly, if we solve this authorization bill problem, and I think we are very close, we are not going to want to see money appropriated to close out this project.

We would like you to consider where we are, and to understand that this $18 million should be used to construct the features of the project, concurrent with the agreement that we have reached, and understand additionally that the Administration has indicated it would likely consider something for a supplemental of $31 million far FY 87.

This is what was indicated by the Interior Department, if and when this authorization bill gets completed. What they are saying is, if you get this authorization done and reformulate the project, so everyone moves forward with the same view of what we will have for our future, they would likely request full funding for fiscal year 1987.

If we get the authorization bill through, we will unlock by the provision in the bill which deems it to have met the March 31 date full funding also for fiscal year 1986.

If that is confusing, I didn't mean it to be, but I wanted to tell you exactly where we are. Very shortly, we will have the authorization bill done and complete, and that will unlock the money for this year, and we will hope then that we will get funding for next year to construct the project.

[The statement of Mr. Dorgan follows:]

Testimony by

Congressman Byron L. Dorgan (D-ND)

Subcommittee on Energy and Water and Development

Committee on Appropriations

April 16, 1986

Mr. Chairman and Members of the Subcommittee:

Thank you for allowing the Garrison Conservancy District and other interested parties from North Dakota to appear before you this afternoon once again to discuss appropriations for the Garrison Diversion project.

As you will recall, in 1984 the Senate added an amendment to the Energy and Water Appropriations Act that mandated a commission be appointed by the Secretary of the Interior to study the Garrison project and make recommendations reformulating the project. The Secretary of the Interior appointed a twelve member commission which studied the project in detail and submitted to Congress recommendations to reformulate the project.

Ever since this special Garrison commission completed its work and made its recommendations, the Garrison Diversion Conservancy District, the Governor of North Dakota, the two senators, myself and various opponents of the project have been involved in a dispute about the interpretation of the commission's recommendations.

In order to reformulate the Garrison project in concert with the special commission recommendations, an authorization bill must be passed by Congress implementing those recommendations. For the past year and one-half the Governor and the North Dakota congressional delegation have been meeting with opponents of the project to reach a compromise on an interpretation of the commission recommendations. The FY86 appropriation of $41.3 million was included by the Appropriations Committee last year with a stipulation that an authorization bill must be passed by Congress by March 31, 1986, for the funding to be used.

In the past two months we have been working very hard to reach an acceptable compromise so that such an authorization bill can be enacted.

I think I finally have some good news to report to you on that score. A compromise between the opponents and supporters has resulted in a new authorization bill proposing reformulation of the project. That authorization bill passed the full Interior Committee on March 19.

We are meeting with the House Rules Committee today and expect the measure to be on the floor of the House next week.

If that compromise is successfully passed by the House and the Senate, there is a provision in the bill that deems it to have met the March 31 date for purposes of the FY86 appropriation.

Mr. Chairman, considering that we've made these enormous strides to reformulate this project, I ask that the committee give favorable consideration to funding for the project for FY87. I know that the Administration has asked for $18 million for FY87 which would be used for closing the project down. I believe that the committee should approve the $18 million, but the money should be targeted to be used for construction on such features as a new Rock Creek Canal and the Oakes Test Area.

In addition, Mr. Chairman, the President noted that if authorizing legislation was passed reformulating the project, consideration would be given to providing more money in a supplemental. It's my understanding, Mr. Chairman, that the Bureau of Reclamation is planning to request an additional $30 million for construction in a supplemental appropriation bill later this year.

I want to reiterate that the support of this committee and you, Mr. Chairman, has been a very important part in keeping this project alive. I thank all of you and especially Chairman Bevill for your support through these many years.

Mr. **Myers**. Authorization is the first step.

Mr. **Dorgan**. Yes, it is through the full Interior Committee, scheduled for the Floor. We just got a rule 30 minutes ago. It will be on the Floor, and we hope it will pass.

We would expect the Senate to take action as quickly as is possible and resolve that authorization problem.

Mr. **Myers**. Could we run out of time?

Mr. **Dorgan**. That is correct.

Mr. **Myers**. Did you say a supplemental could come?

Mr. **Dorgan**. I would hope you would include language in the $18 million, language that would—well, understand that we are about to pass this, this money is likely going to be available to build a project that we are going to agree to for which an authorization bill will be passed.

Mr. **Bevill**. You have worked long and hard on this project, and I am glad to hear you all have reached an agreement on the interpretation, after a year and a half of negotiations.

So, that, in itself, points out the effort and time that you and others have put into this, so we will do what we can to accommodate you.

Mr. **Dorgan**. Your subcommittee has always been very good and your ranking member, Mr. Myers, has been very helpful and the chairman and other members have been very helpful to us.

I was 2 years old when the Pick-Sloan Act was passed, and I am hoping we are going to solve this before I retire, so I think this next step is a quantum leap from the last five, six years.

Mr. **Bevill**. It took me 200 years to build the Tenn-Tom.

Mr. **Dorgan**. We are hoping to move quicker than that. You got it built. That is the test. Thank you, Mr. Chairman, for your cooperation.

Wednesday, April 16, 1986.

ENERGY PROGRAMS

WITNESS

DR. ANTONINE LAFATA SOTTILE

Mr. **Bevill**. Dr. Sottile, we will start with you. We are waiting on Congressman Lott. He is next, but in order to save time, we are going to go ahead and start with you. We may have to interrupt you, okay?

Mr. **Sottile**. Thank you.

Honorable Chairman and members of the committee, Honorable Mr. Myers, I am Mr. Antonine Lafata Sottile, Doctor of Engineering.

Application to appropriate $25 million in fiscal year 1987 in order to work two initiatives of emergency importance to reach national energy independence.

First initiative: A solar mirror settled in earth's synchronous orbit will beam sun radiation 24 hours a day to a field of photovoltaic arrays, and could multiply their efficiency to 20 kilowatt/hours per square meter per day, from the goal of 5 kilowatt/hours per square meter per day still to be reached with ordinary intermittent sun radiation.

Page 2 of this report outlines my project of beam-splitting filter/mirror concentrators in earth's synchronous orbit, which select a portion of the solar spectrum, reject the remainder into space, and focus the selected beam to a field of photovoltaic arrays, at earth's surface.

The selected, uninterrupted beam presents the frequency appropriate to the band-gap of available either cells or thin film, covering the arrays. The higher frequency to the higher band-gap efficiency could reach 30 kilowatt/hours per square meter per day.

Second initiative:

To build a Wagon Eureka, electric vehicle, prototype, my invention, assuring enormous savings of energy in railroads and highways, by exploitation of gravity. Wagon Eureka, through my Atlas interchange, to provide uninterrupted traffic in highways and urban areas.

Page 3 of report outlines their design and their application to my project of a network connecting Union Station to the four important airports around Washington: Dulles, Friendship, Andrews and National, through appropriate tunnels. Travel times lowered to few minutes. Future improvements, next century, as flying on the electromagnetic field, through vacuum, could lower travel times to few seconds.

Page 4 reports the application of the magnetohydrodynamic generator to yield electricity, without heavy rotating copper armature, by means of a flowing plasma, gas at high temperature, over 2530 degrees, Celsius. Efficiencies of 50 percent to 60 percent compared to 25 percent in nuclear plants, and 35 percent in coal-fired plants.

The solar-driven liquid metal magnetohydrodynamic generator presents advantages over the quoted ordinary magnetohydrodynamic. The heat sources of the solar magnetohydrodynamic are very low, in the range of 86 degrees centigrade, through the free solar fuel.

The liquid metal in the solar magnetohydrodynamic is 10,000 times more conductive than the plasma in the ordinary magnetohydrodynamic, which needs a more powerful electromagnet than the solar magnetohydrodynamic.

Page 5 summarizes my 16 statements before this Honorable Congress, detailing numbers of Senate and House records and pages of my statements, which have been methodically "tabled", with huge damage to this country.

Works opportunities, savings of energy, and profits for 1,000 years, assured by my projects, exploiting gravity in transportation and the free solar fuel. Authorities and staffers should remember in their interest that with the flowing of time, the importance of my projects augments.

Thank you.

[The statement of Mr. Sottile follows:]

(1)
***#A

Mr. Antonine Lafata Sottile
Ph. Doctor of Engineering
P.O. Box 28292
Washington, DC
20005-0292

****

Washington, DC. - February 9. 1986 -

Honorable Congress of The U.S.A.
HOUSE Appropriation Committee
Energy and Water Development
Sub-Committee - Washington, DC. 20515 -

REF. Application to Appropriate $. 25. Million in Fiscal Year 1987 in order to work 2. Initiatives of emergency Importance to reach National Energy Independence

Honorable Chairman and Members of the Committee

I am Mr. Antonine Lafata Sottile
Ph. Doctor of Engineering

First Initiative : A Solar Mirror settled in Earth's synchronous ORBIT will beam Sun radiation 24. hour/day to a Field of Photovoltaic ARRAYS, and could multiply their efficiency to 20. KWH. per square meter per day, from the goal of 5.KWH/m^2 xday still to be reached with ordinary intermittent Sun radiation.

Page 2. of this Report outlines my Project of BEAM-splitting FILTER/MIRROR Concentrators in Earth's synchronous Orbit, which select a portion of the Solar spectrum, reject the remainder into Space, and Focus the selected Beam to a FIELD of Photovoltaic ARRAYS, at Earth's surface.

The selected, uninterrupted Beam presents the Frequency appropriate to the BAND-GAP of available either CELLS or THIN FILM, covering the ARRAYS.

The higher frequency to the higher Band-Gap. Efficiency could reach 30. KWH/m^2 x day

Second Initiative :

To build a WAGON EUREKA, electric Vehicle, prototype, my INVENTION, assuring enormous savings of Energy in Railroads and Highways, by exploitation of Gravity. Wagon EUREKA, through my ATLAS Interchange, to provide uninterrupted Traffic in Highways and Urban Areas.

Page 3. of Report outlines their design and their application to my PROJECT of a Network connecting Union Station to the 4. important Airports around Washington : Dulles, Friendship, Andrews, and National, through appropriate TUNNELS.

TRAVEL times lowered to few Minutes. Future improvements, next Century, as Flying on the Electro-Magnetic field, through VACUUM could lower Travel times to few Second

Page 4. reports the application of the MHD. (Magneto Hydro Dynamic) Generator to yield Electricity, without heavy rotating Copper Armature, by means of a flowing PLASMA (Gas at high temperature: over 2530° C°). Efficiencies of 50 % to 60 % compared to 25 % in nuclear Plants, and 35 % in coal fired Plants.

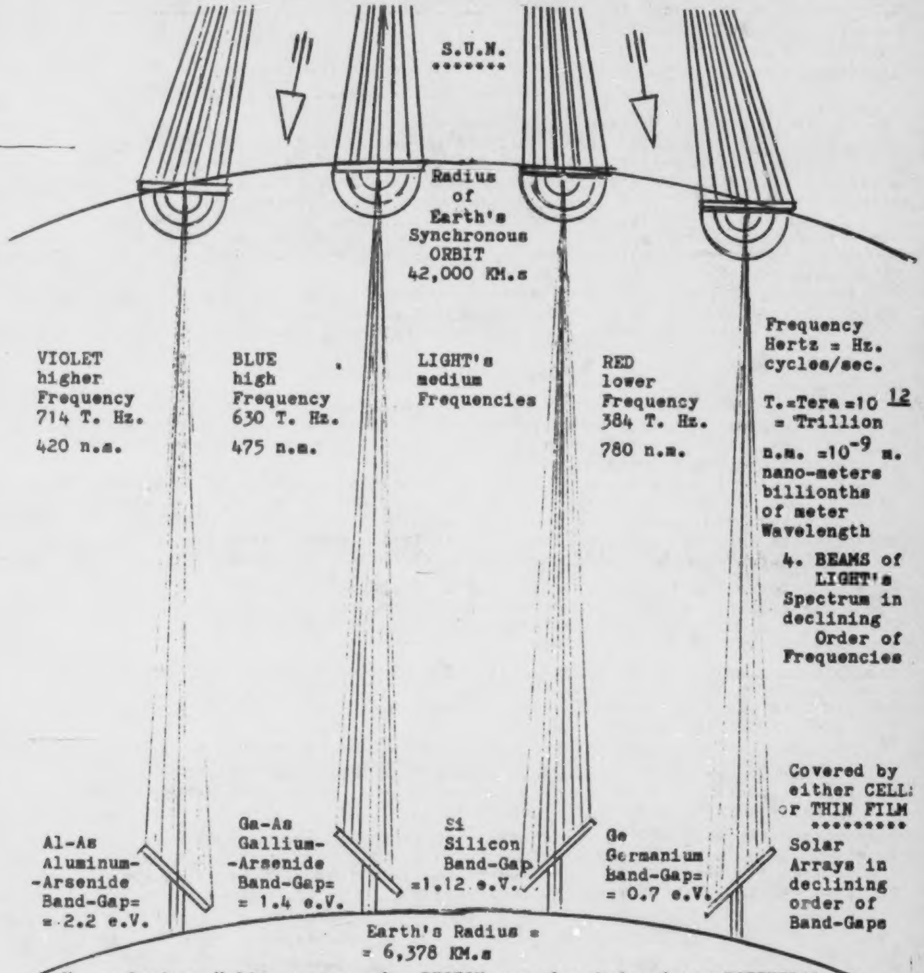
The Solar-Driven LIQUID-METAL MHD. Generator (See NASA Tech Brief) presents advantages over the quoted ordinary MHD. : The HEAT sources of the Solar MHD. are very low, in the range of 86. degrees centigrades, through the FREE Solar Fuel. The Liquid Metal in the Solar MHD. is 10,000 times more conductive than the PLASMA in the ordinary MHD., which needs a more powerful Electro-Magnet than the Solar MHD.

Page 5. summarizes my 16. Statements before this Honorable CONGRESS, detailing numbers of Senate and House Records and pages of my Statements, which have been methodically "TABLED", with huge damage to this Country.

Works opportunities, savings of energy, and profits for thousand years, assured by my PROJECTS, exploiting gravity in transportation and the FREE Solar Fuel. Authorities and Staffers should remember in their interest that with the flowing of time, the importance of my PROJECTS augments

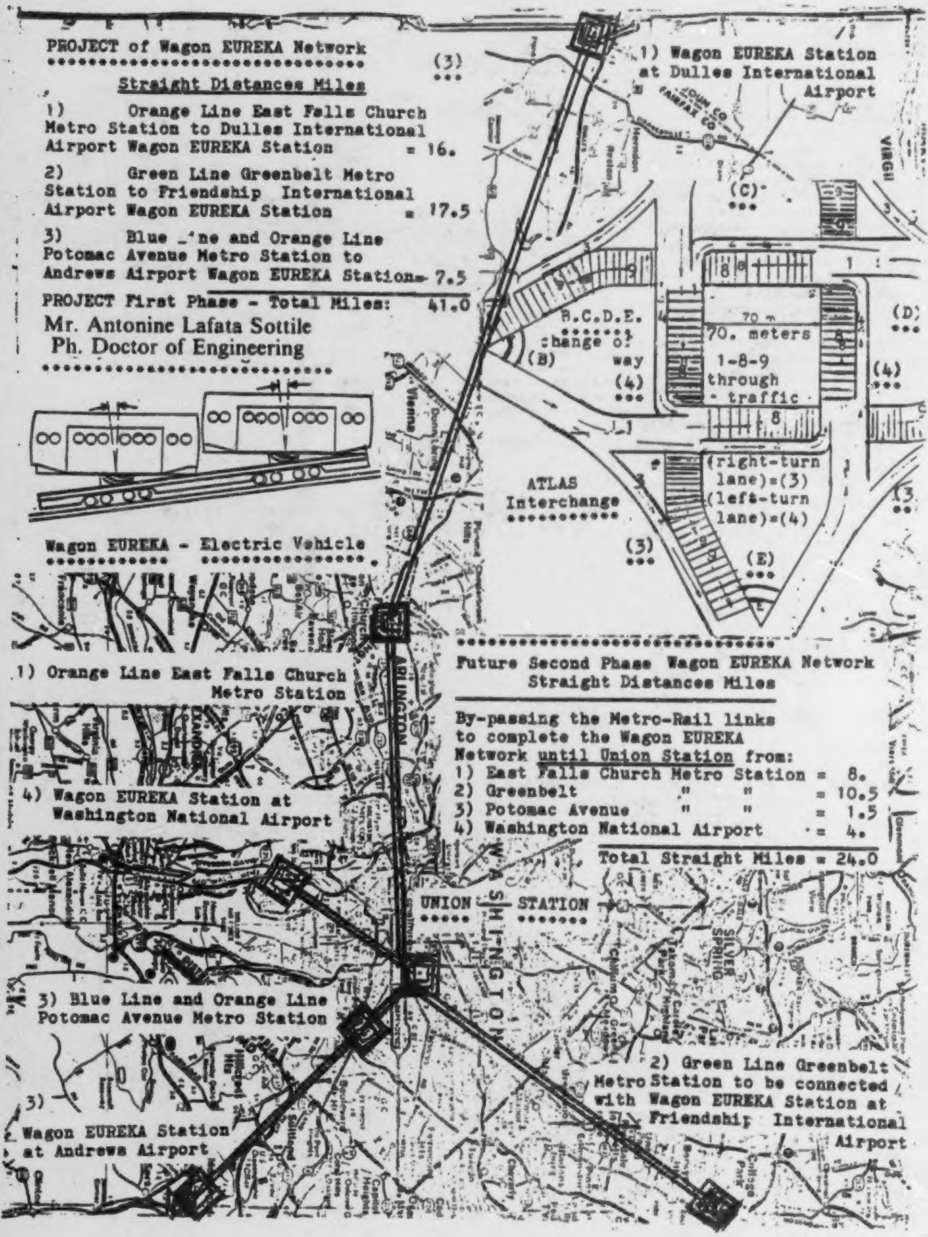
THANK YOU
****

BEAM-splitting FILTER/MIRROR Concentrators in Earth's Synchronous ORBIT Select part of the Solar spectrum, reject the remainder into Space, and FOCUS the selected Beam to a Field of Solar ARRAYS, with CELLS or THIN FILM of Appropriate BAND-GAP, at Earth's surface. The higher Frequency BEAM directed to the Field with higher BAND-GA


S.U.N.
****
Radius of Earth's Synchronous ORBIT 42,000 KM.s
VIOLET higher Frequency 714 T. Hz.
420 n.m.
BLUE high Frequency 630 T. Hz.
475 n.m.
LIGHT's medium Frequencies
RED lower Frequency 384 T. Hz.
780 n.m.
Frequency Hertz = Hz. cycles/sec.
T.=Tera =10^{12} = Trillion
n.m. =10^{-9} m. nano-meters billionths of meter Wavelength
4. BEAMS of LIGHT's Spectrum in declining Order of Frequencies
Covered by either CELL or THIN FILM
****
Solar Arrays in declining order of Band-Gaps
Al-As Aluminum--Arsenide Band-Gap= = 2.2 e.V.
Ga-As Gallium--Arsenide Band-Gap= = 1.4 e.V.
Si Silicon Band-Gap =1.12 e.V.
Ge Germanium Band-Gap= = 0.7 e.V.
Earth's Radius = = 6,378 KM.s

e.V. = electron-Volt = energy of a PHOTON, accelerated under a POTENTIAL of 1. VOLT -

BAND-GAP = energy needed by a PHOTON to FREE an Electron from its Atom, and Promote it into the Conduction Band -



PROJECT of Wagon EUREKA Network

Straight Distances Miles

1) Orange Line East Falls Church Metro Station to Dulles International Airport Wagon EUREKA Station = 16.

2) Green Line Greenbelt Metro Station to Friendship International Airport Wagon EUREKA Station = 17.5

3) Blue Line and Orange Line Potomac Avenue Metro Station to Andrews Airport Wagon EUREKA Station = 7.5

PROJECT First Phase - Total Miles: 41.0

Mr. Antonine Lafata Sottile
Ph. Doctor of Engineering

Wagon EUREKA - Electric Vehicle

Future Second Phase Wagon EUREKA Network
Straight Distances Miles

By-passing the Metro-Rail links to complete the Wagon EUREKA Network until Union Station from:

1) East Falls Church Metro Station = 8.
2) Greenbelt " " = 10.5
3) Potomac Avenue " " = 1.5
4) Washington National Airport = 4.

Total Straight Miles = 24.0

(3)
1) Wagon EUREKA Station at Dulles International Airport
(C)
(D)
B.C.D.E. change of way
(B)
(4)
70 m
70. meters
1-8-9 through traffic
(4)
8
9
1
ATLAS Interchange
(right-turn lane)=(3)
(left-turn lane)=(4)
(3)
(E)
VIRGI
1) Orange Line East Falls Church Metro Station
ARLINGTON
4) Wagon EUREKA Station at Washington National Airport
UNION STATION
WASHINGTON
SILVER SPRING
3) Blue Line and Orange Line Potomac Avenue Metro Station
2) Green Line Greenbelt Metro Station to be connected with Wagon EUREKA Station at Friendship International Airport
3) Wagon EUREKA Station at Andrews Airport
Vienna
College Park

Mr. ANTONINE LAFATA SOTTILE
Ph. Doctor of Engineering
****

NATIONAL ENERGY INDEPENDENCE PROJECT

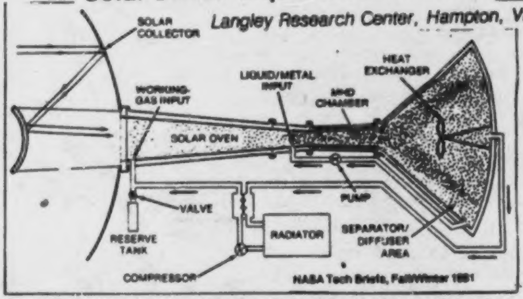
Solar-Driven Liquid-Metal MHD Generator

Langley Research Center, Hampton, Virginia

(4)

A liquid-metal magnetohydrodynamic (MHD) power generator with a solar oven as its heat source has the potential to produce electric power in space and on Earth at high efficiency.

Modern generating plants incorporate irreversible thermodynamic losses due to their complex processes: Fuel is burned to create heat, the heat boils water to create steam, the steam drives a turbine, and the turbine powers a generator to produce the electricity. At each step, energy is lost, yielding an overall efficiency of about 35 percent. MHD generators, on the other hand, produce electricity directly from a moving substance such as a plasma or liquid metal, resulting in efficiencies as high as 50 to 60 percent. This high efficiency suggests that magnetohydrodynamics may be an excellent way to produce electric power from solar energy.

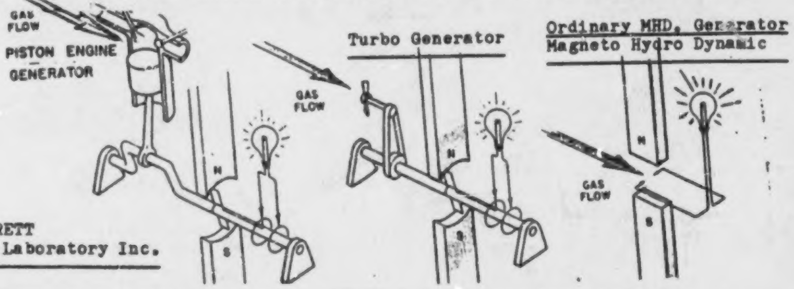


Solar MHD Generator focuses radiation from the Sun to heat a driving gas that pushes a liquid metal past a magnetic coil (not shown above). Power is extracted directly from the electric currents set up in the conducting liquid.

A SOLAR-DRIVEN LIQUID-METAL MHD. (Magneto Hydro Dynamic) GENERATOR beams SOLAR POWER into a SOLAR OWEN, through a transparent Window, kept cool and clean by Helium gas. In the OWEN the Solar Radiation HEATS the Working GAS, which is also compressed by the CONICAL shape of the Owen. As the LIQUID METAL is injected into the Owen, it too is HEATED, and it is MIXED with the DRIVING Gas. In the Mixing Area the Solar Energy is most concentrated, and the two-phase working FLUID is HOTTEST.
As the two-phase FLUID flows through the MHD. CHAMBER, ELECTRICITY is generated. Surrounded by a MAGNET and Power-conditioning unit (not shown in the figure), the Chamber (also called Channel), acts as Turbine and Power Generator.
Opposite ELECTRODES collect Positive and Negative IONS from the flowing Gas -Liquid .
The GAS is separated from the Mixture in the SEPARATOR/DIFFUSER Area, and recuperated in the regenerative Heat EXCHANGER. The Gas is then returned to the Solar OWEN, by way of the Radiator and Compressor.
The Liquid Metal is pumped back into the Mixer.

Advantages of SOLAR-DRIVEN LIQUID-METAL MHD. GENERATOR over ordinary MHD. Generators

The Solar MHD. HEAT sources are in the range of 86 degrees centigrades through the FREE Solar Fuel
Ordinary MHD. Generators use as working Fluid an extremely HOT PLASMA, produced by burning Gas or Coal, with Air injected over 1370° C°. Plasma temperature over 2530°C°. Seeded Potassium Carbonate K_2CO_3 increases Plasma's Conductivity. However the Plasma is 10,000 times less conductive than Liquid Metal, and ordinary MHD. Generator needs a much more powerful ELECTRO-MAGNET, than the Solar-Driven MHD. Generator.



Turbo Generator

Ordinary MHD, Generator
Magneto Hydro Dynamic

AVCO EVERETT
Research Laboratory Inc.

An MHD Generator requires no steam boiler, turbine, or rotating Machinery.
In a conventional power plant, electricity is generated by rotating a solid copper conductor (Armature) through a magnetic field. An MHD. Generator uses a high temperature conducting gas (PLASMA) as its Armature. Efficiencies: 50%to 60%

Mr. Antonine LAFATA SOTTILE My STATEMENTS before the CONGRESS of The USA on behalf
Ph. Doctor of Engineering of NATIONAL ENERGY INDEPENDENCE - Years 1975 to 1985 -
Honorable SENATE and HOUSE Committees on APPROPRIATIONS - January 28. 1986 -

- 16) FY. 1986 HOUSE Record Part 9. pp. 3132 to 3141 - Hearings April 3. 1985 -
- 15) " " SENATE " " 3. " 2693 " 2702 " " " " - (5)

My Project to connect UNION STATION with the 4. more important AIRPORTS around DC., linked by a network of underground Tunnels, exploiting Gravity, through WAGON EUREKA, my INVENTION. See Outline 3. Travel times down to few Minutes. Advanced improvements, next Century, as Flying on the Electro-Magnetic Field, and VACUUM, could bring down Travel times to few Seconds. My ATLAS Interchange, also outlined there, eliminates all Stopping-lights, and provides UNINTERRUPTED TRAFFIC in Highways and URBAN Areas.

- 14) FY. 1985 SENATE Record Part 4. pp. 2431 to 2436 - Hearings April 5. 1984 -
- 13) " " " " " 8. " 1430 to 1436 " " " " -

Technological, Environmental, and Economical Impact of my PROJECTS: their Importance increases by passing of time, being based on the 7. Immortal Principles to solve forever problems of Energy and Economics: 1.Solar Energy 2.Electrification 3.Electro--Magnetic flying 4.En.savings 5.Tunneling 6.Gradients utiliz. 7.Wagon EUREKA expansion

- 12) FY. 1984 SENATE Record Part 3. pp. 1643 to 1653 - Hearings March 24. 1983 -
- 11) " " HOUSE " " 7. " 874 to 884 - " " " " -

The required $. 25. Million of Appropriations to be utilized for 2. Initiatives of emergency Importance: 1) To build a Wagon Eureka, prototype. 2) To Shuttle a Solar Mirror in Earth's Synchronous Orbit, and experiment its efficiency on Photovoltaics.

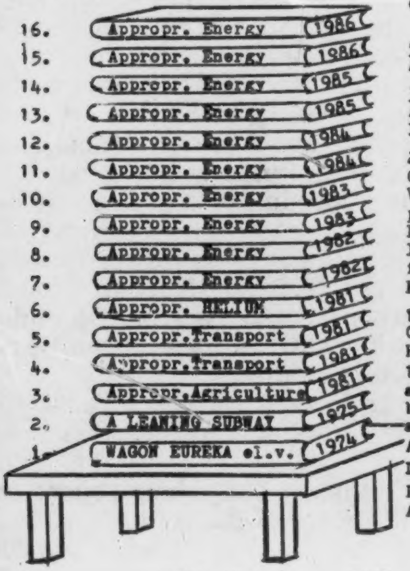
- 10) FY. 1983 SENATE Record Part 4. pp. 2711 to 2717 - Hearings April 24. 1982 -
- 9) " " HOUSE " " 8. " 2586 to 2593 - " " " " -

120 Solar Mirrors settled in Earth's Synchronous Orbit could provide the total Energy of every kind utilized in one year in The USA =about 8.76 Trillion KWH/year -

- 8) FY. 1982 SENATE Record Part 3. pp. 1932 to 1943 - Hearings March 24. 1981 -
- 7) " " HOUSE " " 10. " 2402 to 2411 - " " " " -

Planets VENUS and MARS conditioned in a lapse of 50. years, vs. 1000. yrs. by Others-

SENATE and HOUSE : TABLED STATEMENTS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Appropr.Agriculture
1981
2.
A LEANING SUBWAY
1975
1.
WAGON EUREKA el.v.
1974

6) FY. 1981 SENATE Rec. P.3 pp. 953-957 Hearings May 16. 1980 INTERIOR: HELIUM Standard replacing Gold Standard, next Century, as MONETARY Guaranty

FY. 1981 Transportation Appropriat. Hearings
5) SENATE Rec. P.2 pp. 144-150 April 17. 1980 -
4) HOUSE " " 7 " 615-619 " 16. " -

3) FY. 1981 SENATE Agriculture Appropr. Hearings Apr. 2. 1980 Rec. P.3 pp. 513-514-515 Useful Industrial Products by HARVESTED Plants -

2) SENATE Cttee. on Commerce, Science, & Transp. Oct. 7-10 Hrgs. on S.1632 & HR.8800 Electric Vehicle R.D.,& D. Act of 1975 - Record 94-96 pp. 161-164: My Project: LEANWAY=A Leaning Subway LEANWAY's MOTTO:"To build & to operate 2.Subways, like the DC.Area Metro-Rail, by the BUDGET needed for only one". "To move 5. alike Subways by the ENERGY required for only one"

1) HOUSE Science & Technology Cttee. June 3-6 1975 Hrgs on HR.5470 Electric Ve. Act of 1975 Rec. 27 pp. 728-740My INVENTION WAGON EUREKA assures 4/5 Savings of Energy in Transportation by its UNDERFRAME engaged in successive downgrades and upgrades providing FREE positive & negative ACCELERATIONS. Its BODY is kept at PERMANENT LEVELNESS, utilizing: GYROSCOPIC effect of FLYWHEELS; LASER Beam Gyroscope; Resistance of AIR at higher & highest SPEEDS, like aircraft. . . .

WEDNESDAY, APRIL 16, 1986.

MISSISSIPPI WATER RESOURCE PROJECTS

WITNESS

HON. TRENT LOTT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI

Mr. BEVILL. Our good friend and colleague, Congressman Trent Lott, is here. Trent, we are always pleased to hear from you.

Mr. LOTT. I ask unanimous consent that my prepared statement be put in the record.

Thanks for letting me go this late.

Mr. Chairman and members of the committee, I want to thank you for giving me this opportunity to come before you and discuss both the Gulfport and Pascagoula Harbors in the Fifth District of Mississippi.

Gulfport Harbor is located in Harrison County, Mississippi, on the Mississippi Sound about 80 miles from New Orleans, Louisiana and 80 miles from Mobile, Alabama.

The proposed plan of improvement is to modify the existing ship channel to 38 feet deep and 400 feet wide across ship island bar and to 36 feet deep by 300 feet wide in the Mississippi sound with change in channel alignment and in the entrance to the Anchorage Basin to provide for sale and unrestricted navigation.

The Corps of Engineers report was submitted to Congress on November 28, 1978, and the improvement of Gulfport Harbor was authorized in the fiscal year 1985 Supplemental Appropriations Act, Public Law 99-88. The initial allocation of funds is being used to develop updated costs and benefits and coordinate cost-sharing requirements with the local sponsor.

Mr. Chairman, I am here today to express my support for the pre-construction planning efforts for the Gulfport Harbor Project and to request that the Gulfport Harbor project receive the budgeted $800,000 for fiscal year 1987 which will be used to continue engineering, environmental and economic studies.

Mr. Chairman, Pascagoula Harbor is located on the Mississippi Sound, about 100 miles east of New Orleans, Louisiana and 45 miles west of Mobile, Alabama.

On March 10, 1986, the Corps of Engineers sent their report on Pascagoula Harbor to the Assistant Secretary of the Army.

The report recommends deepening the existing Federal project from 38 to 42 feet at a width of 350 feet in all channel segments except in the entrance channel. The entrance channel would be 44 by 550 feet.

Because of the study schedule and the timing of the resulting report, authorizing language was included in the form of a committee amendment in S. 1567. The total cost of the proposed project is $57.3 million and the benefit-cost ratio is 3.1 to 1.

On February 26, 1985, General Charles Edgar, South Atlantic Division Engineer, told your committee that for fiscal year 1987 the Corps of Engineers' capability for the Pascagoula Harbor project is $900,000 to initiate the continuation of planning and engineering requirements in preparation for construction.

Mr. **Bevill**. We appreciate your good work and the support you give our subcommittee, and certainly we will work with you in trying to accomplish what you have set out to accomplish.

Mr. **Lott**. I do support the 5 million for Oklahoma State University in the supplemental appropriations.

Mr. **Watkins**. I came before the Rules Committee the other day, and he was bringing this up. I was going to mention to you that it sounds like you have a lot of things there that would fit well in Oklahoma.

Mr. **Lott**. Your International Trade Center will develop some information that will help us in promoting trade through the Ports of Gulfport and Pascagoula, maybe a little through Mobile.

Mr. **Myers**. Gulfport is budgeted. Is Pascagoula, is it budgeted at all?

Mr. **Lott**. I don't think it would be at this point because of the timing and the process.

Mr. **Myers**. A couple of years ago, we failed to get what your request was, and I apologize for that.

Mr. **Lott**. Last time, I didn't come to you and make you aware of my concerns.

Mr. **Bevill**. Well, thank you very much.

The committee will stand adjourned until the call of the Chair.

[The following statements were submitted for the record:]

TESTIMONY OF CONGRESSMAN CHARLES O. WHITLEY

Relating to the U.S. Army Corps of Engineers'
West Onslow Beach and New River Inlet Study
scheduled before
THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
April 16, 1986

SUMMARY

This is a request for final funding of $100,000 in the FY 1987 budget for completion of the U.S. Army Corps of Engineers' West Onslow Beach and New River Inlet, N.C. study. The study includes stabilizing and deepening New River Inlet and erosion control and hurricane protection on 21 miles of barrier island, known as Topsail Island, between New River Inlet and New Topsail Inlet.

Mr. Chairman, since the U.S. Army Corps of Engineers began the West Onslow Beach and New River Inlet, N.C., study in 1978, $712,000 in federal funds has been spent on that project or committed to it. The study itself involves two inlets - New River Inlet and New Topsail Inlet - separated by 21 miles of moderate to heavily developed barrier island known as Topsail Island.

The reconnaisance study began in 1978 and was completed in February, 1982. Briefly, the problems identified in the study are: (1) The authorized 6-foot by 90 foot ocean bar channel is not adequate for the needs of commercial fishermen whose alternatives are more than 100 miles away; (2) the lack of an adequate dune system has caused a threat to heavily developed beach areas and has allowed considerable damage to beach homes and motels.

The reconnaissance study found that alternatives for navigation improvement are economically feasible while erosion controls for beach and hurricane flood protection are marginal.

The need for channel improvement has long been recognized and sought by commercial and sports fishermen whose enterprises make up a very important part of the economy of eastern North Carolina.

The design work that has already been done as a result of the findings of the reconnaissance study is vital to the conclusion, of course, but the work that remains to be done is also vital.

Unless the job is completed, the $712,000 already spent or committed is money down the drain, and a solution to the New River Inlet problem is no closer now than it was in 1978. Abandonment of the project at this stage would appear to be a very counterproductive "economy".

In view of the commitment and demonstrated need of a very important industry and way of life in my district, I would urge you and your colleagues to give careful consideration to final funding of the West Onslow Beach and New River Inlet, N.C., study. Delays will add to future costs because of the likelihood that re-study would be required.

I respectfully request that the committee include $100,000 in the FY 1987 budget as completion funds for the West Onslow Beach and New River, N.C., study.

NINETY-NINTH CONGRESS

WALTER B. JONES, NORTH CAROLINA, CHAIRMAN

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U.S. House of Representatives
Committee on
Merchant Marine and Fisheries
Room 1334, Longworth House Office Building
Washington, DC 20515

CHIEF COUNSEL
EDMUND B. WELCH

MINORITY STAFF DIRECTOR
GEORGE D. PENCE

April 10, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Energy and Water
Development Appropriations
2362 Rayburn House Office Building
Washington, D. C. 20515

Dear Mr. Chairman:

Enclosed is testimony I submit for the record regarding issues pertaining to eastern North Carolina that I feel should be brought to your Subcommittee's attention.

I appreciate your giving my views every consideration as you prepare a budget for the Army Corps of Engineers.

With warm personal regards, I am

Sincerely,

Walter B. Jones

WALTER B. JONES
Chairman

Enclosure

STATEMENT OF THE HONORABLE WALTER B. JONES, CHAIRMAN, COMMITTEE ON MERCHANT MARINE AND FISHERIES, BEFORE THE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

APRIL 10, 1986

MR. CHAIRMAN, MEMBERS OF THE SUBCOMMITTEE, ONCE AGAIN I GREATLY APPRECIATE THIS OPPORTUNITY TO TESTIFY BEFORE YOUR SUBCOMMITTEE. IN THE ADMINISTRATION'S PROPOSED BUDGET FOR FY 87, THERE IS A REQUEST FOR $5.79 MILLION FOR DREDGING OF THE MANTEO (SHALLOWBAG BAY) CHANNEL, COMMONLY CALLED OREGON INLET. I FULLY SUPPORT THIS PROPOSAL.

THE OREGON INLET CHANNEL HAS BEEN THE TOPIC OF MANY DISCUSSIONS IN THE PAST FEW YEARS, BOTH WITH RESPECT TO ITS DREDGING AND THE CONSTRUCTION OF JETTIES TO KEEP THE CHANNEL OPEN. I FEEL VERY STRONGLY THAT INTENSIVE DREDGING SHOULD CONTINUE AT OREGON INLET WITH ADEQUATE FUNDING. IT IS VITAL TO THE FISHING INDUSTRY THAT OPERATES OUT OF THIS INLET THAT THE CHANNEL BE KEPT OPEN AS MUCH AS POSSIBLE BY WHATEVER MEANS THE ARMY CORPS OF ENGINEERS HAS AT ITS DISPOSAL. CONTINUED AND INTENSIVE DREDGING WILL HELP TO MINIMIZE THE ECONOMIC DAMAGE SUFFERED BY THE RESIDENTS OF THIS AREA DUE TO THE LACK OF A GUARENTEED OPEN CHANNEL 12 MONTHS OF THE YEAR.

MY SECOND REQUEST IS THAT THE SUBCOMMITTEE INCORPORATE REPORT LANGUAGE ENCOURAGING THE ARMY CORPS OF ENGINEERS TO BROADEN THE SCOPE OF THE STUDY ENTITLED "EASTERN NORTH CAROLINA ABOVE CAPE LOOKOUT," INITIATED UNDER THE FLOOD CONTROL ACT OF 1965.

MY DISTRICT CONTAINS ONE OF THE LARGEST CONTIGUOUS ESTUARINE AREAS IN THE UNITED STATES -- THE ALBERMARLE-PAMILCO ESTUARY.

CURRENTLY, EFFORTS ARE UNDERWAY TO DEVELOP A COMPREHENSIVE, LONG-TERM MANAGEMENT STRATEGY FOR THAT ESTUARY. THE ARMY CORPS OF ENGINEERS HAS AN ONGOING STUDY WITHIN THAT AREA WHICH CAN PROVIDE INVALUABLE SUPPORT FOR THIS MANAGEMENT EFFORT. BY BROADENING THE SCOPE OF THE STUDY, THE CORPS' INFORMATION WILL BE OF GREAT ASSISTANCE TO OTHER PARTICIPATING STATE AND FEDERAL AGENCIES. IN PARTICULAR, THE STUDY SHOULD INCLUDE HYDROLOGY, WATER QUALITY, AND LAND USE ISSUES IN THE REGION. WITH THIS EXPANDED FOCUS, THE STUDY WILL SERVE THE TRADITIONAL CORPS MISSIONS IN NAVIGATION AND FLOOD CONTROL, BUT WILL ALSO CONTRIBUTE TO THE OVERALL COMPREHENSIVE MANAGEMENT OF THIS MAJOR ESTUARY. I HAVE ATTACHED DRAFT REPORT LANGUAGE FOR THIS SUBCOMMITTEE TO REVIEW.

I ALSO REQUEST THAT $250,000 BE MADE AVAILABLE IN ORDER THAT THE CORPS MAY COORDINATE WITH THE NATIONAL MARINE FISHERIES SERVICE (NMFS) TO INVESTIGATE AND IMPLEMENT TECHNIQUES TO RESTORE DEGRADED COASTAL FISHERY HABITAT IN EASTERN NORTH CAROLINA. THE CORPS AND NMFS RECENTLY CONCLUDED A MEMORANDUM OF UNDERSTANDING IN ORDER THAT THE TWO AGENCIES INVESTIGATE NEW METHODOLOGIES TO RESTORE FISHERIES HABITAT.

MY LAST REQUEST FOR THE SUBCOMMITTEE TO CONSIDER IS THE FUNDING NEEDED FOR THE OPERATION AND MAINTENANCE OF THE GREAT DISMAL SWAMP CANAL, WHICH IS APPROXIMATELY $350,000.

ONCE AGAIN, AS HAS BEEN THE CASE FOR THE PAST SEVERAL YEARS, THE ADMINISTRATION HAS FAILED TO INCLUDE ANY FUNDS FOR THE OPERATION AND MAINTENANCE OF THE CANAL IN ITS FY 87 BUDGET PROPOSAL. AS I RELATED TO THIS SUBCOMMITTEE IN APRIL, 1985, THE

ARMY CORPS OF ENGINEERS INITIATED A STUDY TO DETERMINE THE FUTURE OF THE CANAL. OPERATIONS AND MAINTENANCE FUNDS WERE PROVIDED BY THIS SUBCOMMITTEE FOR FY 86 PENDING THE OUTCOME OF THAT STUDY. THE STUDY IS NOT EXPECTED TO BE COMPLETED UNTIL SEPTEMBER, 1986, AT THE EARLIEST. HOWEVER, PUBLIC RESPONSE IN SUPPORT OF MAINTAINING THE CANAL IN AN OPERATIONAL CONDITION HAS BEEN OVERWHELMING. WHILE THE CANAL'S HISTORIC VALUE ALONE JUSTIFIES THIS LEVEL OF FUNDING, THE ECONOMIC IMPACT OF THE CANAL ON NORTHEASTERN NORTH CAROLINA IS ALSO EXTREMELY SIGNIFICANT. I SEEK THIS $350,000 SO THAT THE HISTORIC AND ECONOMIC BENEFITS OF THE CANAL CAN BE MAINTAINED PENDING THE CONCLUSION OF THE CORPS STUDY.

DRAFT REPORT LANGUAGE REGARDING THE "EASTERN NORTH CAROLINA ABOVE CAPE LOOKOUT STUDY"

THE ARMY CORPS. OF ENGINEERS IS INSTRUCTED TO BROADEN THE SCOPE OF THE "EASTERN NORTH CAROLINA ABOVE CAPE LOOKOUT STUDY" TO INCLUDE HYDROLOGY, WATER QUALITY, AND LAND USE ISSUES IN ADDITION TO THE FLOOD CONTROL INFORMATION NOW BEING GENERATED BY THE STUDY. IT IS THE SUBCOMMITTEE'S INTENTION THAT THIS CONTINUED EFFORT BE DONE UNDER THE AUTHORITY OF SECTION 208 OF THE FLOOD CONTROL ACT OF 1965 (P. L. 89-298) WITH EXISTING FUNDS.

TESTIMONY OF CONGRESSMAN BART GORDON

APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

APRIL 16, 1986

Thank you for the opportunity to testify before the Appropriations Subcommittee on Energy and Water Development. As a Representative from the 6th District of Tennessee, I would like to recommend that this Subcommittee delete the $46 million that the Department of Energy has requested for the MRS (Monitored Retrievable Storage) nuclear waste facility in its FY '87 Budget.

As you know, the Department of Energy was scheduled to submit its MRS proposal to Congress on February 6, 1986. Because of the Department's failure to consult and cooperate with the State of Tennessee in selecting a site for the MRS facility, a U.S. District Court ruled that DOE had violated federal law and enjoined it from submitting the proposal to Congress. The MRS proposal is now "on hold" because the case is on appeal in the U.S. Circuit Court in Cincinnati.

Yet DOE is determined to proceed with the MRS regardless. The DOE budget request includes $46 million for "activities that are critical to the deployment of an MRS." This request is in blatant disregard of both legislative and judicial procedures and is DOE's attempt to sidestep Congress by slipping the MRS funding through the back door. We cannot let DOE get away with this.

I believe that such a large sum of money should not be appropriated for a project that has yet to be approved by Congress. More importantly, I believe that the entire MRS concept is faulty. The MRS is a costly, unnecessary stopgap measure that fails to address the long-term problem of nuclear waste disposal.

We all realize that we live in a nuclear age. We can no longer afford to ignore the problem of nuclear waste in hopes that it will disappear. Every year the stockpiles of nuclear waste grow, and this high-level waste will remain radioactive for an estimated 10,000 years.

Nuclear waste disposal is a permanent problem. It demands a permanent solution. Congress had this fact in mind when it passed the Nuclear Waste Policy Act in 1982. The Act, which mandates the construction of a permanent geological repository, acknowledges that the only safe way to manage nuclear waste is to isolate and bury it for thousands of years.

But DOE has other ideas. Somewhere along the line DOE modified the original plan and decided it wanted to build a temporary waste dump in Tennessee. This MRS will collect most, if not all, of the high-level radioactive nuclear waste in the U.S., repackage it, and send it away for permanent disposal in the West.

When DOE officials first briefed me about their MRS plan, I was skeptical and informed them that the burden of proof regarding the necessity and feasibility of the plan rested with the Department. I believe DOE has failed to prove its case.

The fact is the temporary nuclear waste dump is not necessary. The Department of Energy itself admits this. The Congressional Office of Technology Assessment admits this. Tennessee Governor Alexander's Safe Growth Council confirms this. There are viable -- and more sensible -- options.

The most logical and efficient option would be to consolidate and store the waste at the nuclear power plants that produce it, and then ship it directly to the permanent disposal site. The DOE's own reports acknowledge that these reactors can continue to store their waste on site until the first permanent repository is completed and, in fact, are responsible by law to do so.

Additionally, the DOE's report states that the permanent repository could be responsible for storing and consolidating nuclear waste from western state reactors. If the permanent site can be an MRS for western states, why not for the entire nation? Packaging and disposing of the waste at the same site would eliminate the additional step.

The MRS is not necessary. Yet, DOE wants to spend billions of dollars to put it in Tennessee. Why spend billions on a project whose necessity, feasibility and safety are questionable? This time of huge deficits and budget cuts requires fiscal restraint--not fiscal irresponsibility.

Why is DOE so intent on building this unnecessary and costly temporary dump? The answer is clear to me and shouldn't surprise anyone familiar with DOE's track record. DOE wants to get out of its commitment to begin permanent disposal of America's nuclear waste by 1998. To appease the nuclear utilities, DOE has entered into a series of contracts obligating the government to take title to the waste by 1998. In light of the already serious delays in the permanent repository, DOE is counting on the MRS as a way to get out of its bind.

Already DOE has postponed the selection of the permanent repository site from 1987 to 1991. According to an Office of Technology Assessment report, a permanent dump probably will not be constructed until at least the year 2008. If DOE goes forward with the MRS, it will have an excuse to delay the construction of the permanent repository even further. It is inevitable that the MRS will divert energy and resources from building the permanent facility, and that the MRS will become much more than just a temporary nuclear dump.

Nuclear waste is a permanent problem, and it requires a permanent solution--not a temporary dump in Tennessee. I am convinced that the MRS is nothing more than an expensive roadblock to finding a permanent solution to the storage of nuclear waste in the U.S. I hope that your review of this proposal will lead you to the same conclusion and that this Subcommittee will eliminate funding for the MRS from the Appropriations Bill.

STATE OF ILLINOIS
OFFICE OF THE GOVERNOR
SPRINGFIELD 62706

JAMES R. THOMPSON
GOVERNOR

April 16, 1986

Honorable Tom Bevill
Chairman
Subcommittee on Energy
and Water Development
Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Bevill:

Attached please find five copies of the State of Illinois' proposed project list for the FY 87 budget of the Corps of Engineers. I appreciate your consideration and favorable action on this request.

The attached list identifies those Corps of Engineers projects that are of high priority to the State of Illinois. Each of these projects has been analyzed by four separate Illinois agencies and was found meritorious and worthy of funding from the FY 87 appropriations for the Corps. The projects were analyzed using the most recent information concerning cost, need, local sponsorship and Corps interest. The list includes items contained in the President's FY 87 budget request and others that we propose for special consideration.

I recommend that you include these projects in the FY 87 Energy and Water Development Appropriations Act. Should you require any supporting documentation for these projects or other information, please don't hesitate to contact Donald R. Vonnahme, Director, Illinois Division of Water Resources, at 217/782-2152. I request that this correspondence be included in the hearing record of the Subcommittee.

Sincerely,

James R. Thompson

James R. Thompson
GOVERNOR

Enclosure

Fiscal Year 1987
STATE OF ILLINOIS
TESTIMONY ON APPROPRIATIONS
FOR
U.S. ARMY CORPS OF ENGINEERS
CIVIL WORKS PROGRAM
APRIL 1986

The State of Illinois supports the following projects which are contained in the President's Fiscal Year 1987 budget.

SURVEYS

Alexander and Pulaski Counties	$ 400,000
Diversion of Lake Michigan	230,000
Illinois River between Henry and Naples	330,000
Illinois Shore Erosion	415,000
Loves Park (CP&E)	490,000
St. Louis Metropolitan Area	1,054,000

CONSTRUCTION

Brandon Road Lock & Dam (Rehab)	5,470,000
Kaskaskia Island Drainage & Levee District	2,300,000
Lock and Dam No. 26	85,000,000
Lock and Dam No. 26 Second Lock	2,000,000
Locks and Dam No. 53 (Rehab)	1,700,000
Mauvaise Terre Drainage & Levee District	500,000
Rockford	950,000
Smithland Locks and Dam	486,000
South Quincy Levee & Drainage District	1,000,000
Upper Mississippi River Environmental Management Plan	1,000,000

OPERATIONS AND MAINTENANCE

Illinois supports the Corps' budget request for continued adequate maintenance and operation of completed navigation and flood control projects in and bordering the state.

NAVIGATION

Lower Ohio River Navigation Project: Illinois supports efforts to improve navigation on the Lower Ohio River. We are currently reviewing the Corps of Engineers report on the Lower Ohio River, and will be discussing the report in detail with the Corps. While we support continued engineering studies for navigation improvements, we suggest that part of the $1.5 million budget request be used for additional study of the new lock and dam at Olmstead. This study should specifically assess the environmental impacts of the proposed higher pool level on Illinois nature preserves and aquatic floodplain habitat. The study should also include testing the design of the open pass portion of the proposed dam.

Wabash River Navigation Study: The budget request also includes $200,000 for the Wabash River Navigation feasibility study. The State of Illinois supports Corps projects found to be economically feasible and environmentally sound. This project was studied by the Corps in 1977 and found to be economically infeasible. Any re-analysis of this proposal should emphasize the economic costs and benefits associated with the project and potential environmental impacts.

In addition to the projects in the President's budget for which we have indicated support, the State of Illinois also has additional needs and priorities which are listed below.

SURVEYS

North Branch Chicago River (CP&E)	$ 230,000

CONSTRUCTION

Upper Mississippi River Environmental Management Plan--this represents an increase from the FY 1987 request level of $1,000,000.

$3,900,000

CONTINUING STUDIES FOR ILLINOIS

Floodplain Management Services	$ 500,000
Section 22 of PL 93-351	200,000

BILL LANGUAGE

Illinois Beach State Park: Over the past few years, Congress has supported funding for the Interim I study of Illinois Shoreline Erosion. This study is an investigation of shoreline erosion problems along the Illinois shore of Lake Michigan between the Illinois-Wisconsin State line and the City of Waukegan. The major portion of the shoreline is included within the Illinois Beach State Park. Work on this effort has stopped at the Corps' Chicago District level and the Corps has indicated that a final feasibility report recommending Federal action will not be pursued. This action by the Corps is taken even though the Corps' own report has indicated a positive cost/benefit ratio for the section of the shoreline encompassing the public beach.

Illinois would like to request that your committee adopt bill language to direct the Corps to submit this report through the normal Corps review and to issue a Chief's report. The language should indicate that "such sums as are necessary" be made available for the Corps to process the report through its channels.

Thank you for your attention to Illinois' concerns.

STATE OF ILLINOIS
OFFICE OF THE GOVERNOR
SPRINGFIELD 62706

JAMES R. THOMPSON
GOVERNOR

April 16, 1986

Honorable Tom Bevill
Chairman
Subcommittee on Energy
  and Water Development
Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Bevill:

Attached please find five copies of testimony for your hearing record regarding the Department of Energy's Low-level nuclear waste program.

Should you have any questions regarding this testimony, please feel free to contact Ann Van Leer of the Illinois Washington Office at 624-7760.

Thank you in advance for your consideration.

Sincerely,

James R. Thompson

James R. Thompson
GOVERNOR

Enclosure

TESTIMONY FOR THE RECORD
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
REGARDING THE DOE LOW-LEVEL NUCLEAR WASTE PROGRAM

APRIL 1986

SUBMITTED BY GOVERNORS

JAMES R. THOMPSON (ILLINOIS) RICHARD W. RILEY (SOUTH CAROLINA)
RICHARD F. CELESTE (OHIO) JAMES BLANCHARD (MICHIGAN)
RICHARD P. LAMM (COLORADO)

Mr. Chairman and Members of the Committee: We thank you for the opportunity to present our views on a matter of vital importance to states and compact regions responsible for developing a low-level radioactive waste disposal facility.

Between now and January 1, 1993, the task of siting and developing several new low-level waste disposal facilities must be completed. But the technological and political issues facing states and compact regions are enormous. This is especially true where the type of facility previously used (shallow land burial) is prohibited or politically unacceptable. Thus, at the same time that studies are being performed to find suitable locations for new facilities, substantial work must also be done to evaluate alternative technological approaches for disposing of low-level radioactive waste.

The extent to which progress is made during the next few years will determine whether a new nationwide system of low-level waste management can be achieved. Technical and financial assistance from the U.S. Department of Energy (DOE) is critical to the success of this effort. DOE has already begun to facilitate states' efforts by issuing grants for studies related to national low-level waste issues, such as siting and disposal technology evaluation. In addition, the DOE low-level radioactive waste management program, operated by its primary contractor, EG&G Idaho, has a national computer network which includes economic models for evaluating site development and waste disposal costs, waste disposal data for individual states, and a low-level waste manifest tracking system. DOE is also helping sponsor a national coordinating committee for evaluating alternative disposal technologies, has sponsored public participation workshops, has assisted states in developing programs which will facilitate adequate siting schedules and has published numerous proceedings and information documents related to low-level waste management including the annual state-by-state assessment of low-level waste disposal, waste minimization procedures and case histories of local cooperation and incentives.

The financial and technical resources available for completing the tasks required by the Low-Level Radioactive Waste Policy Amendments Act of 1985 are limited, particularly during the critical two-year period just ahead, and they must be used efficiently. DOE can promote this efficiency through the types of activities described above. Sufficient time is not available for each state and region to engage in a "trial and error" approach to evaluating technologies and developing siting procedures. With DOE's assistance, individual states and regions can build on the knowledge of others, and they will not be required to perform these analyses independently.

Unfortunately, at a time when DOE's assistance is most critical, appropriations for the low-level waste program continue to be reduced. The funding level of $6.2 million for Fiscal Year 1985 was reduced to $4.65 million for Fiscal Year 1986. A further reduction (to $4.0 million) is proposed for Fiscal Year 1987. States such as Illinois and Texas, each of which has made significant progress toward developing a new facility, have already felt the impact of reductions in DOE's budget. In each case, the states have been told by DOE that grants previously approved for assisting in the development of new facilities will be available, but at reduced levels, and that no additional assistance to the states will be granted under the funding level proposed in the president's budget.

We strongly urge Congress to reject the proposal by the DOE to reduce the funding level for the low-level waste program. Continued reductions will make the assistance on which states had intended to rely unlikely, if not impossible. This is particularly true in light of recent provisions which were included in the Low-Level Waste Policy Amendments Act of 1985. These provisions place new responsibilities on the Department of Energy including:

1. Conducting a year-long study on "above class 'C' wastes" and "assuming responsibility for such wastes";

2. Managing the allocation of 800,000 cubic feet of disposal capacity provided to utilities for unusual operating eventualities;

3. Managing an escrow account, comprised of 25% of the surcharges that will be rebated to the states and compacts upon achieving specific milestones; and

4. Producing an annual report of the progress of states and regions in meeting the deadlines in the Act and on industry's procedures for handling low-level waste.

Each of these new responsibilities must be funded out of DOE's low-level waste budget which means that the limited resources available to states from DOE will be reduced even further.

While we recognize that the responsibility for implementing a low-level waste management and disposal system now rests with the states, such a system cannot be implemented without full cooperation and assistance from the Federal government. We are convinced that if the Federal government's level of conmmitment is reduced at this critical juncture, successful implementation of the system will be placed in serious jeopardy. The cost of failure will be high since if the States are not successful, responsibility for low-level waste may shift to the Federal government. I think you would agree that this outcome would be an unfortunate and costly result.

For these reasons, we urge the Congress to increase the amount available for the DOE's Low-level waste program in FY87.

AAU

Association of American Universities

President

April 10, 1986

The Honorable Tom Bevill
Chairman
Subcommittee on Energy & Water
Committee on Appropriations
2362 Rayburn House Office Building
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for the opportunity to present views on the budget for university research programs of the Department of Energy for Fiscal Year 1987.

Attached is my statement for inclusion in the written record of the hearing on FY 1987 Appropriations for Energy and Water.

Respectfully,

Robert M. Rosenzweig

Robert M. Rosenzweig

Attachment

RMR/GAS:spc

Mr. Chairman and members of the Subcommittee, my name is Robert M. Rosenzweig and I am President of the Association of American Universities. I submit this testimony in behalf of the membership of the Association of American Universities, the American Council on Education, the National Association of State Universities and Land-Grant Colleges, and the Council of Graduate Schools which represent virtually all of the nation's universities and colleges which carry out research supported by the Department of Energy. They also train most of the research scientists who carry on basic and applied research activities at American universities and in industry. I would like to present to you our views with regard to the FY 1987 budget request for DOE university research programs by first addressing some general concerns and then discussing them in the context of the DOE budget.

THIS IS NOT AN ORDINARY YEAR

I cannot recall a year in which budgetary matters were so filled with uncertainty, in which the whole process seemed headed toward a destination which no one in it could foresee, and in which the possibility of serious damage to important social institutions seemed so real. I do not believe that the DOE budget for research and university programs, or perhaps any other budget, can be considered by a Congressional committee without regard to responsibilities of the Members that go beyond their subcommittee and committee assignments and the agencies within their jurisdiction.

This is not an ordinary year. What most marks off this year from others is a pervasive sense of vulnerability that makes even good news suspect. Universities feel that vulnerability keenly because the harmful impacts of several essentially unrelated policy lines seem to be converging on those institutions. If those lines truly do meet, then there is the real prospect of serious damage to universities and to the intellectual activity they sustain.

One set of policies impinging on universities is that generated by deficit reduction pressures. Almost every federal program on which universities rely is slated for reductions. The proposed cuts will force either reductions in institutional programs or the increased subsidizing of those activities by other elements of the institution.

Second, the proposed revisions to OMB Circular A-21, which would cap particular components of indirect cost recovery, will hit the budgets of research universities heavily. If those rules take effect as proposed, losses in the millions of dollars a year will be incurred by some institutions, and virtually all universities will suffer noticeable reductions. Although the new rules may be prompted, in part, by the deficit pressures, the impetus for them predates the present crisis and really derives from a mistaken view that the costs of research that can be associated with an individual project are somehow more real and important than those that need to be pooled and allocated to all projects. That may sound to you, as it does to me, like a rather arcane bit of accounting theology, but unfortunately the effect of policies based upon it will be to starve the body while expecting the brain to continue to function. Such a policy will not work for long.

The third line of policy converging on universities is tax reform. The House-passed tax bill contains a number of provisions that will simultaneously cost universities more money and severely undermine their ability to raise money from private philanthropy. The deliberations that led to the passage of the House bill did not include considerations of education or science policy, but the effect of the provisions adopted must be taken into account by anyone who cares about the health of America's universities or the nation's capacities in science and technology.

The combination of circumstances I have described exposes universities to special and largely unintended jeopardy, an important fact to be considered by those who make policy for the nation.

What is to be done? The answers are: to support budget levels that will help sustain the enterprise through a difficult period; to help to prevent arbitrary, damaging, and non-negotiated changes in the principles that govern indirect cost recovery by urging OMB to enter into genuine consultation with affected parties; and to oppose changes in the tax code that would lessen the incentives for private philanthropy and thereby make it less likely that private efforts can compensate for the inevitable diminution in federal programs.

If we are to achieve solutions that will not just provide short-term relief but will also lay the foundation for sustained economic health, then I submit that it is necessary to begin to think of national budgeting in more than arithmetic terms. We do not put together budgets in private or public life solely in order to have them balance at the end. In all organizations except government, we distinguish between expenditures for current use and investments aimed at future return. Without that elementary distinction it is impossible to make analytical sense out of our national accounts or to know whether we are spending too much or too little. And if we are unable to do that, it is hardly any wonder that we are unable to come to grips with the question of how much money we need to raise as a nation in order to meet the demands of the present and the challenge of the future.

In that last sentence lies the key element in your efforts to find a broad and solid base for the future productivity of basic scientific and engineering research and training and therefore for the health of the institutions in which those take place. There is no coherent and realistic program for meeting the nation's real needs that does not take a hard look at revenues along with expenditures. We are not paying for what we need, and any solution that does not confront that fact will do more harm than good.

My remarks go far afield from the testimony that one would ordinarily give but I have done so because it seems to me evident that when you have finished work on this DOE budget, you will, as Members of Congress, face an agenda that is even more important to science and to universities than the annual budget of any single agency can be. I urge you to bring to those larger issues the same purposes and perspectives that move you to believe that the university research programs of the DOE merit your support. More than at most times, this year's motto must be, "One war, many fronts."

WHITE HOUSE SCIENCE COUNCIL REPORT ON THE HEALTH OF UNIVERSITIES AND COLLEGES

I would like to call to your attention an important new report, soon to be published, by the White House Science Council titled A Renewed Partnership. Chaired by Mr. David Packard and Dr. D. Allan Bromley, the report is an examination of the health of our universities capabilities to meet our future requirements for well trained talent and new knowledge.

The Council's report reaffirms a fundamental fact: our universities and colleges are important to our national interest because they produce the scientific and technical talent essential to our economic productivity, our technological progress, our health, our national security, and ability to compete in the international marketplace. However, there are troubling signs that our universities capabilities to attract and educate the best students in science and technology are being steadily eroded. Problems associated with obsolete equipment, outdated laboratories and increasingly severe shortages of advanced students and faculty continue to hamper us in essential fields of science and engineering.

We will all do well to consider thoughtfully the implications of the Council's sobering conclusion: **"Our universities today simply cannot respond to society's expectations for them or discharge their national responsibilities in research and education without substantially increased support."**

We face a shortage of highly trained people, our richest resource. At current production rates, and in the face of a declining student pool, we face serious shortfalls of trained scientists and engineers. The NSF reports that continuation of present policies and practices may well yield a drop from 1983 of nearly 700,000 bachelor-level scientists and engineers by the year 2011.

We are failing to attract sufficient numbers of U.S. citizens, especially minorities and women, into advanced training in science and engineering. The recent NSF report Science Indicators 1985 states that between 1980 and 1983 total full-time enrollment in graduate engineering and science programs grew by 6 percent; however, 85 percent of this increase is accounted for by foreign students. In 1983, foreign students accounted for about 40 percent of total graduate enrollment in engineering, mathematics and computer sciences. More than one-half of PhD degrees earned in engineering now are awarded to foreign nationals. As undergraduate enrollments in engineering, computer science and related fields are climbing to record highs, we are increasingly dependent upon foreign nationals to teach them.

A recent report of The Engineering Education Task Force (formed by the National Society of Professional Engineers, the American Society for Engineering Education and the National Association of State Universities and Land-Grant Colleges) reports that: while student enrollments have grown more than 115 percent over the past fifteen years, faculties have grown by only 10 percent; as much as a 23 percent increase in faculty positions is needed to bring the student-faculty ratio close to optimum teaching conditions; and the ability of entering engineering students--the majority of who are in the top 10% of their high school graduating classes--is helping, but only somewhat, to offset present limitations.

The cause of this is because we are underinvesting in academic research and advanced education. In 1984, only $8.4 billion of the nearly $100 billion invested in research and development nationally, was invested in universities. Despite overall gains of about eight percent in FY 1984, overall Federal investment in universities and colleges continues to decline as a percentage of total Federal R&D. Nevertheless, Federal agencies are, and will remain, the primary source of investment in basic science and engineering.

Recently, Dr. Alan Bromley, CoChair of the White House Panel, reported that, if present levels of Federal investment are sustained for a decade we will fall "an order of magnitude short" of meeting our needs in the 1990s. The research agencies of the Federal government, the Council concludes, are the only source of funding for the needed investments. The Council recommends that federal investments in university research and training programs be doubled to seize the unprecedented opportunities for scientific and technological progress.

Each of the following recommendations of the White House Science Council Panel has immediate implications for the FY 1987 Appropriations for the DOE. The Council recommends that Federal research agencies take the following steps:

- increase substantially investments in universities and colleges,
- establish university-based interdisciplinary, problem oriented research and technology centers,
- bear the full share of the cost of university research,
- establish policies that recognize university infrastructure (research facilities and equipment) costs as integral to university research,
- minimize burdens and expand the flexibility of the administrative arrangements for the support of research,

- establish substantial programs of multi-year, merit-based graduate fellowships in science, mathematics, and engineering, and

- encourage interdisciplinary activities at the graduate level.

RECOMMENDATIONS

Mr. Chairman, we endorse the recommendations of the Science Council, and we urge the Subcommittee to incorporate them into the FY 1987 Appropriations for DOE:

Basic Research Programs

The basic research programs of the Department of Energy have and continue to make significant contributions to this nation's technological advancements and, in the process, train the graduate students who will carry forward the nation's research and development efforts. The programs of the Office of Energy Research (OER) provide over 85% of DOE's total funding of direct awards to universities for the conduct of R&D. These programs support important long-term basic science research in several disciplines including high energy physics and nuclear physics. Continuity of support is essential to the long-term nature of this research.

The proposed budget for OER programs, with the exception of the Magnetic Fusion program, provides for continuity in research funding. The proposed budget of $441.4 million for Basic Energy Sciences is only $7.6 million (2%) higher than the current level of $433.8 million but follows some significant growth in the program over the last few years.

The proposed budget of $773.4 million for General Science programs is $118 million (18%) higher than the current level of $655.4 million. The $546.7 million request for High Energy Physics is $51.9 million (10%) higher than the current budget of $494.8 and will bring that program back to a level approximating the FY 1985 level of $541.9 million. The proposed budget of $224.2 million for Nuclear Physics is $59.7 million (36%) higher than the current budget. The increase provides continuity for the research program and includes $33 million for first year construction funds for the Continuous Electron Beam Accelerator Facility (CEBAF).

The proposed budget of $333.0 million for the Magnetic Fusion program is down $32.4 million (9%) from the current level of $436.9 million. The reduction will affect applied plasma physics and magnetic mirror technology activities at several universities and Lawrence Livermore Laboratory.

At a minimum, we ask that the Committee support these program budgets at the Administration's requested levels.

Graduate Education

The federal commitment to excellence in engineering and science education supported by federally funded fellowship programs has eroded. In 1983, federal agencies supported only 20% of the number of graduate fellowships awarded in 1968. Of those supported, only 1,600 were in engineering and science. DOE supports only about 25 such fellowships in narrowly defined fields. We believe that the DOE should strengthen its commitment to graduate education along the lines recommended by the White House Science Council, and we urge you to consider the need for a DOE graduate fellowship program.

The best approach, we suggest, would be a two-part program to provide for (1) portable, three-year graduate fellowships awarded to students based on their demonstrated achievements and future promise; and (2) department traineeships competitively awarded to strong departments that carry out DOE-funded basic research programs. Such a program would link talented students to proven, productive departments in a way that would strengthen our national capacity for both research and advanced education in energy-related fields. Both the National Science Foundation and the DOD's Office of Naval Research (ONR) have strong merit-based, portable graduate fellowship programs that are good models.

University Research Instrumentation and Facilities

The research capital deficit continues to be the most pressing problem facing universities. For more than twenty years, no Federal research agency has reinvested broadly in the modernization of university laboratories engaged in its competitive research programs. After taking the effects of inflation into account, the real level of capital investment by our universities has declined 20 percent in ten years. In FY 1974 the Federal agencies provided 27 percent of the total facilities funds spent by universities; in FY 1984 the Federal share was only 12 percent, and essentially all of these funds were dedicated to specialized facilities.

Because federal agencies have recognized the serious consequences posed by obsolete research equipment, important progress is being made on the equipment problem. In FY 1984, universities spent $518 million for research equipment, an increase, according to NSF, of 15 percent in constant dollars over 1983 levels. Federal research agencies supplied about two-thirds of these funds. After many years of neglect, Federal investment research equipment again is growing at a reasonable rate.

The magnitude of the research equipment problem is illustrated by DOE's Research Instrumentation program which continues the essential effort to upgrade university research instrumentation. For this year's program, the Department has received 204 applications from 103 institutions. The average application request is $244,000; the requests total $49.8 million. With its current budget of $6.2 million, the Department estimates that it will be able to make approximately 25 awards.

We are particularly grateful for the support this program received last year by the Congress which added $2 million to the FY 1986 requested budget. The proposed request of $5 million for the Research Instrumentation program is down $1.2 million (20%) from the current budget level. We encourage the committee to support, at a minimum, the University Research Instrumentation program budget at a level equal to the current budget of $6.2 million.

Expanded direct investment in research facilities and equipment must be accompanied by further improvements in the utilization of available funds and instruments. Last summer the AAU, the National Association of State Universities and Land-Grant Colleges and the Council on Government Relations published a report titled *Financing and Managing University Research Equipment*. It suggests several steps that might usefully be taken by funding agencies, state governments, industry and universities to strengthen the acquisition of equipment and improve the utilization of costly research instruments. We commend this report and its recommendations to the Committee's attention.

The future return on all of these essential investments will be determined, in large part, by the soundness of the decisions that the Congress and the DOE make in the award of the funds. The funds for research, instrumentation, and facilities ought to be awarded on the basis of scientific merit in open competition among all interested and qualified parties. Final judgments ought to be formed in an objective and informed manner, free from any actions that could serve to make the award of such funds a matter of political influence rather than the quality of the work to be done and the capacity of competing applicants to carry out the work at the highest level.

I urge that the Committee insist that decisions about funding be guided by the goal which I know we share--the need to produce the highest quality science and engineering of which we are capable as a nation.

Thank you for the opportunity to submit this testimony to the subcommittee.

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JAMES C. TAYLOR
President and
Chief Executive Officer

April 8, 1986

Congressman Jamie L. Whitten, Chairman
House Appropriations Committee
U. S. House of Representatives
Washington, D.C. 20515

Dear Congressman Whitten:

The attached statement in support of a continuing national effort to develop an economical and safe liquid metal reactor (LMR) for the United States was drafted by the major industrial participants of the Department of Energy's LMR program. Those participants include Combustion Engineering, General Electric, Rockwell International and Westinghouse. It has been our experience that these industrial participants have been very effective in using limited resources after termination of the Clinch River Breeder Reactor, to continue with a responsible and well directed effort on the LMR program.

Although we are a coal burning utility and see no immediate need for application of nuclear technology on our system, ultimately we and other utilities will need replacements for fossil fueled power plants. The LMR, which is presently being aggressively developed by other industrial countries, gives promise of meeting the future energy needs of the world. It would be a sad commentary if the U. S., which was the first nation to develop peaceful uses for nuclear energy, had to import that technology in the future.

We are supportive of the need to reduce governmental expenditures at all levels. To that end we believe that funding for such long-term energy sources as fusion energy should be reduced significantly. A modest and continuing effort on the more developed LMR would seem to be in this country's best interest. We encourage your support for this vital Department of Energy sponsored work.

Very truly yours,

James C. Taylor
President and Chief
Executive Officer

JCT:kc
Attach.

Joint Statement in Support of Civilian Liquid Metal Reactor (LMR) Program

(Prepared by Westinghouse Electric Corporation, General Electric Company Rockwell International, and Combustion Engineering)

The United States pioneered in the application of nuclear power for peaceful purposes. The rest of the industrialized world has followed, and has now surpassed us in taking advantage of this safe, clean and economical energy source. For example, in 1985 France relied on nuclear energy for over 65% of their electricity generation, while Belgium, Finland, Sweden, and Switzerland were in the 50% range. Japan, Taiwan, and Korea are moving ahead to deploy nuclear plants. Nuclear energy provides lower energy costs for their industries while freeing them from dependence on expensive energy imports. In contrast, the United States has had a defacto nuclear moratorium, now in its twelfth year.

If we do nothing about this we face the prospect of increasing reliance on a single source, coal, to meet our energy needs, higher energy costs, which result in less competitive products, increased oil imports, and a worsening balance of trade.

What has caused this dangerous reversal? There is general agreement that the root causes are institutional in nature: uncertain and changing licensing requirements resulting in extraordinarily long schedules and unacceptable financial risks, lack of public acceptance, and the absence of a definitive national energy policy.

The French experience provides a good example of a national effort to bring an important new technology to commercial readiness. They have carried out a methodical program to reduce their dependence on imported energy resources, both oil and uranium. As a result, they have developed the capability to deploy the LMR when it becomes economically or strategically important for them to do so. In the process, France has become a world leader in the nuclear field.

DOE has given priority, which we endorse, to a near-term program to overcome these obstacles by reforming the licensing process, standardization of designs and requirements, and evolutionary improvements in the LWR.

However, the world does not stand still, and we cannot expect that the design choices of the 50s and 60s will meet our long-term requirements. The LMR provides a technologically proven next-generation nuclear option which not only focuses on utility and public issues and concerns, but also provides for the long term.

The goals of this program include:

- Inherent, passive features to assure safety and investment protection
- Greater replication in the factory and field
- NRC design certification to provide known, stable licensing specifications
- Less nuclear-grade field work
- Shorter and predictable construction schedule
- Flexibility to match load growth
- Reduced capital requirements and smaller at-risk investments
- Competitive power costs
- Acceptable financial risks

Moreover, the LMR has been recognized throughout the world as the best way to provide an inexhaustible nuclear fuel supply when resources of low-cost uranium ore have been depleted. A successful LMR program in the interim will provide the technology and experience base to support the eventual switch to the breeder when this is necessary.

Although we in the private sector recognize the importance of developing the LMR, we also realize that this cannot be done without major assistance from the Federal Government. The time and investment required, and--in the absence of the stability represented by design certification by NRC--the attendant financial risks involved in commercialization of the LMR preclude private enterprises from undertaking the job alone.

The U.S. government needs to react decisively, even in these years of concern over the deficit, to preserve the important national resource represented by the industrial capability to design and build an LMR. Paper studies and research will not be sufficient. A minimum program must be directed toward the design, licensing, and eventual fabrication, construction, and operation of an LMR that satisfies the stated program goals. The private sector is prepared to share in the costs, but cannot be expected to carry the burden alone, especially with the risks associated with licensing.

In fiscal year 1987, adequate funding for industrial design efforts is needed to support selection of the most promising features and concepts and to obtain NRC review and approval of these features. Supporting development activities, including operation of key facilities, should also focus on a decision to proceed with a reactor project in the early 1990s. With international interest in the U.S. design effort increasing, such a program can lead to regained technological leadership for the U.S. in the economic use of nuclear energy worldwide.

University of Illinois
at Urbana-Champaign

Fusion Studies Laboratory
214 Nuclear Engineering
Laboratory
103 South Goodwin Avenue
Urbana, IL 61801

Nuclear Engineering Program
217 333-3772

April 11, 1986

Honorable Tom Bevill
House Appropriations Committee
2302 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Bevill:

Per discussions with Mr. Don Smith, I am enclosing a statement for incorporation in the hearing proceedings for the Magnetic Fusion Budget.

Thank you for permitting me to present views on this subject for the UFA.

Sincerely,

George H. Miley

George H. Miley, Director
Fusion Studies Laboratory

GHM:rm

cc: Mr. D. Smith

Enclosure

STATEMENT ON THE MAGNETIC FUSION BUDGET -- FOR THE UNIVERSITY FUSION ASSOCIATION BY G. H. MILEY -- PREPARED FOR THE HOUSE APPROPRIATIONS COMMITTEE

April 8, 1986

I currently serve as president of the University Fusion Association (UFA) which consists of groups from 51 universities from across the country that are heavily involved in fusion research.

A plentiful source of environmentally compatible energy is essential for the long-term survival of our society. Oil, regardless of price is not the answer. Fusion is the most likely and attractive answer. Great strides have been made in fusion research and development over the past decade. But the current treatment of fusion research funding is so disastrous that this avenue may be put on a back burner which will be very difficult to ignite again when needed. Why? The key to success is the involvement of the best and most creative scientists and engineers. But, unless something is done, we now stand in danger of losing just such persons to other fields. Once that happens, it will be a long and difficult job to rebuild.

Finding ways to retain the best researchers and attract the best students to fusion research is a prime objective of UFA. With that goal in mind we have carefully considered the proposed budget and the response from D.O.E. regarding the three main issues involved:

(1) Is the proposed overall budget cut to $333M appropriate?

(2) Is the degree of focussing proposed in the technical program appropriate?

(3) Can international collaboration be used to revitalize the fusion program?

Based on this review, we wish to respectively submit the following proposal:

Approximately 3 to 5% additional funding should be added back into the fusion budget to support innovative and new ideas.

The most successful "high tech" companies set aside a percentage of their funds for research to promote creativity and new ideas. Shouldn't the fusion program do the same? Yet the combination of budget cuts and narrowing of the D.O.E. program has virtually eliminated the possibility of new research directions. If allowed to happen, this will both stifle the program and drive creative scientists and engineers away.

The proposed funding would provide a much needed vitality in research, including:

(1) Seed money to initiate new innovative research proposed by workers from universities, industry, and D.O.E. laboratories. Such grants would be of a limited duration so that seed money would be available on a recurring basis.

(2) A program to foster international collaboration at the basic research level concurrent with present plans for developing joint facilities. An exciting possibility would be to support "twinning" of U. S. universities with counterparts overseas where common research interests exist.

(3) Some funds would be used to cushion sudden severe cuts forced on specific areas of the program. Support should be provided to retain a low level of basic studies in these areas so that the years of work and money expended up to this point are not wasted.

At this point I would like to briefly point out some of the reasons that we feel that the decisive action proposed is desperately needed. The University role in fusion development has been to provide innovative new ideas through basic research and, at the same time, attract and educate the best students for careers in fusion R&D. Indeed, university involvement in fusion research has often been held up as a model for other federal programs. However now it is clear that if current directions are continued, the university community in fusion will rapidly dry up.

It must be expected that decreases in budget will be shared and, indeed universities have shared the overall budget cut and have even taken a somewhat larger percentage decrease.* Now we have reached the point where smaller university groups are becoming "subcritical" in size. Thus, soon they will either be completely cut out of the budget or fade away. Unlike most other areas of science, there are no alternate sources of funds to provide a backup. For example, NSF has clearly stated that the D.O.E. is responsible for fusion related research. Students are beginning to recognize the situation and there is a clear drop in student interest. This growing concern about the future of the fusion program has been further aggravated by contradictions between policies and actions at the national level. Congress overwhelmingly passed the Magnetic Fusion Engineering Energy Act of 1980 but then immediately ignored it. Fusion was identified as a key national research program but then it was cut back in funding more severely than other national research areas (see the Feb. 26, 1986 testimony before the HS&T Committee by Dr. Allan T. Mense). President Reagan singled out fusion for international collaboration but now the new fund cuts will make such collaboration difficult.

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*See my testimony before the HS&T Committee, Feb. 26, 1986.

Is there hope that things will get better? Unfortunately, "no"! The projections for the 1988 budget bring yet another blow to the university community. Along with the plight of small university groups already noted, D.O.E. has indicated plans to shutdown the three largest university experiments - TARA and Alcator at M.I.T. and Phaedrus at Wisconsin. The phase-out is to begin in 1987.

Thus the bleak picture that emerges is that as many as half of our present UFA members (representing smaller groups) will disappear by 1988-89 and the largest university experiments will be gone. The corresponding loss in students and faculty involved in fusion research will be very significant. It is in the face of this picture that we have proposed the added money to support innovation. Such a fund would provide the opportunity and excitement needed to retain some of our best people and attract bright young scientists and engineers. Without such help, the losses are going to be staggering.

An obvious question is: where will the money come from? I do not believe that this is an impossible hurdle. As already noted, other research programs have fared better so the thought is not out of the realm of possibility. As a last resort, perhaps innovation can be used here. For example, the proposal by some to add an oil tax to support long range energy research makes much sense. I am afraid, however, that financing is beyond the scope of UFA. I must leave that complex problem to Congress. However, I hope that I have been able to convey to you the need and the urgency of the situation.

In summary, the fusion program stands in danger of losing two of its most valuable resources -- the most creative participants and an influx of the best young scientists and engineers. Once lost, it will be difficult, if not impossible, to replace such people when the need becomes clear again, as it surely will. To combat this danger, we have proposed added funding to support innovative new research. If enacted, the opportunity opened by such funding would provide the excitement and challenge necessary to attract and retain the type of individuals we desperately need in fusion research.

Thank you for this opportunity to provide this statement on behalf of UFA.

G. H. Miley has been active in UFA since its inception, and he is currently the President of the Association. He is Professor of Nuclear and Electrical Engineering at the University of Illinois at Champaign-Urbana where he is the Chairperson of Nuclear Engineering and Director of the Fusion Studies Laboratory.

Statement of Bernard S. Lee, President
Institute of Gas Technology
Before the House Committee on Appropriations
Subcommittee on Energy & Water Development
Hearings on FY'87 Appropriation for the Department of Energy's Fossil Energy Research and Development Program

April 7, 1986

Mr. Chairman and Members of the Subcommittee:

My name is Bernard S. Lee. I am President of IGT, a not-for-profit energy R&D organization in Chicago.

Having spent my entire career in energy research, I am concerned that energy is no longer viewed as an important issue today. There are those who say that funding of energy research should be cut drastically or even eliminated. They see the trends of the recent past - falling prices, supply surpluses - as irrefutable proof that forecasters who predicted the world was running out of fossil fuel resources were wrong. Yet the current energy surplus situation is no more proof that the "experts" were wrong than the supply interruptions of the '70's were proof that their predictions had suddenly come true.

Despite the recent decline in oil prices, our long- or even medium-term domestic energy availability is not one whit better than it was ten years ago; in fact, it is worse. Even before the current "free-fall" in oil prices, drilling for oil and gas in the U.S. had begun to decline rapidly. Well completions were off 20% in 1985 from the previous year and down nearly 30% from the 1981 record. The current drop parallels last year's decline in the rig count and 1986 has gotten off to a bad start with 31% fewer operating rigs than a year ago. Domestic spending on exploration and development has plummeted from almost $40 billion in 1982 to $27 billion in 1984 and dropped another 15% in 1985. If oil prices stay down for 2-3 years, investment in exploration and development will decline even more. When you consider that drilling is increasingly moving to remote and difficult locations that are expensive to develop, the magnitude of the decline becomes even more serious. All the Persian Gulf producers are doing is pushing the oil price down to the point where we will again be addicted to "cheap" oil, while totally neglecting alternative energy developments.

It's worth noting that despite the $250 billion spent by the petroleum industry on domestic exploration over the 1980-84 period, proved oil reserves declined from 30 to 28 billion barrels and the U.S. has the lowest ratio of proved oil reserves-to-production (only 9 years) of any major oil producing country. Our nation's proved gas reserves in the lower 48 states have similarly declined and are now equivalent to only 10 years production.

Several months ago, even when the universal prognosis was that oil prices would remain stable, several industry and government forecasts were published that foresaw a significant decline in domestic oil production from nearly 9 million bbl/day in 1984 to 7-8 million bbl/day by the end of the century, and a concomitant rise in imports from 30% to half of our total oil demand over the same period. Oil imports are already our single largest import item - three times greater than the second largest, automobiles - and could cost as much as $100 billion annually by 2000.

However, even these forecasts are outdated by recent events, since lower prices will boost consumption and further discourage exploration and production investments. Lower prices will also discourage private sector research and development outlays because they constrain energy companies' cash availability, and postpone the prospects of commercialization of alternative energy sources and innovative production techniques. Further, oil company research budgets have been hit in some instances by the double whammy of drastically lower crude prices, coupled with significant debt loads and redeployment of fiscal resources. They are not just cutting exploration, but in even greater measure, R&D efforts. Excellent laboratory facilities and professional research capabilities are being decimated.

The argument has been made that increased dependence on oil imports would not adversely affect our energy security, since we and our allies have switched our sources away from the Persian Gulf to non-OPEC producing areas and more "secure suppliers". But, a recent GAO report cautions against the U.S. taking for granted the ability and willingness of individual Caribbean countries to sustain or increase oil supplies to us. Mexico and Venezuela were our number one and number three crude oil suppliers. The GAO report stressed the limits both of these countries have placed on exports to the U.S., and that they have either curtailed or delayed maintenance of existing oil facilities as well as development of new fields. An increase in U.S. demand could force a resumption of Middle Eastern petroleum imports.

It's also important to keep in mind that the major non-OPEC discoveries - the North Sea, the North Slope - were the result of exploration expenditures made before 1973-74 and that similar investments are not being made today. Thus, unless major new discoveries are made outside the Persian Gulf - and this seems unlikely - we may be back on bended knee to the Persian Gulf producers. Dependence will increase not only in the U.S. and other industrialized countries but in the developing countries as well. This indeed is part of OPEC's strategy - to boost oil demand worldwide and to discourage new discovery efforts, heightening worldwide dependence on OPEC.

This nation is on a collision course between growing dependence on expensive imports and a contraction of investments in the development of viable alternatives. Although this may not be the time for massive expenditures on development, this is certainly not the time to savage the federal energy research effort. Rather, the Congress should "stay the course" in continuing to provide for a cost-effective federal presence in the support of energy research. Now is the time to channel funding into next-generation technologies so that we have them "on the shelf" to be deployed when they are needed. But, you can't put a technology "on the shelf" for later use if there is an incomplete data base. One result of omitting critical links in technology development, is that the government will be unable to receive an adequate return on its investment in energy R&D of previous years.

We have suggested in past testimony that we need a mature national energy policy that directs a balanced and sustained program to develop appropriate technologies to meet our future energy needs. This policy should ensure a smooth flow of technology from the laboratory to commercial use. There is a need for a sustained federal role in energy research. The private sector is unlikely to continue the development of a broad array of energy technologies once federal support is interrupted, because the private sector can only concentrate on the short term in view of the arbitrary and politicized nature of the world energy arena. The private sector cannot risk its resources to strive for long-term stability when faced with the uncertainties and fluctuations of a world market controlled by different national governments.

A level of funding close to the Appropriation levels of FY'85 and FY'86 would appear to be appropriate to ensure that only the best research ideas are pursued. We do not seek expansions, rather we seek a sustaining of federal energy research efforts consistent with due concern for the federal budget deficit. Bear in mind the impact of adequate energy supplies on the Nation's economy: employment, GNP, the homeowner. We have already witnessed the impact of crude prices on the world economy. For example, with every $5 drop in the price of oil, our cost of living drops by 1%. The reverse is also true. Therefore, Congress and the Executive Branch should establish a sound energy policy and set priorities in the federal budget accordingly.

IGT has followed rigorous procedures in formulating recommendations to Congress for assistance on the budget. Each year we apply a thorough technical evaluation of the Nation's future energy requirements and the funding sources available from both government and industry. With this in mind, we are proposing a suite of research efforts which are small scale, inexpensive approaches to a variety of energy problems. As part of the gas industry position on energy RD&D for FY'87, we recommend the following specific programs in which IGT is involved:

Geopressured Resources

IGT recommends $4.2 million be provided for DOE to fulfill its contractual obligation in FY'87 for the continued operation of the Pleasant Bayou, Hulin, and Gladys McCall field wells to resolve technical issues on production of hydrocarbons and brine, and generation of electricity from the fluids produced.

Biofuels

IGT recommends $1.35 million for the joint funding of an ongoing GRI program at the Walt Disney World to biologically convert municipal solids waste (MSW), industrial wastes and sewage sludge to methane gas. IGT also recommends $2.0 million for the thermal conversion of MSW or refuse-derived fuel (RDF) in the existing high-pressure, inert-solid fluidized-bed PRU.

Thermal Energy Storage

IGT recommends $2.0 million to continue research in industrial applications of the composite-phase-change TES technology by conducting tests of the composite media in a PDU, and then using the data obtained to design a cost-shared, proof-of-concept facility to be located at an industrial site.

Thank you for the opportunity to present my views. I will be happy to answer any questions.

Selected Energy Research
Recommendations FY'87

Program Fact Sheet

UNCONVENTIONAL GAS

Geopressured/Geothermal Energy:

Geopressured/geothermal energy involves the coproduction of natural gas and hot brine. It is well known that there are thousands of TCF of methane in the ground in conjunction with geopressured reservoirs. In order to produce cost competitive natural gas, and thus attract commercial risk capital, there are technical issues that need to be resolved. The Department of Energy currently has underway as part of its geopressured resources program, a research project involving specially drilled geopressured/geothermal wells in the Texas/Louisiana Gulf Coast area. This project includes production testing coupled with scientifically sound data collection and analysis necessary to determine:

* the quantity of hydrocarbons produced with the brine

* the thermal and hydraulic energy content of the produced brine

* the best methods to produce electricity from both the hydrocarbons and the energy content of the brine

* optimum techniques to treat the brine to inhibit corrosion and scale formation, remove solids, and dispose of the produced brine in a environmentally sound manner.

This project will provide information which will be available to industry and, therefore, lower the perceived risks associated with development of this important resource.

IGT recommends $4.2 million be provided to continue funding the existing DOE contract in which three field wells, Pleasant Bayou, Hulin, and Gladys McCall, will be used to resolve technical issues on production of hydrocarbons and brine, and generation of electricity using the energy content of the produced fluids, thus reducing the risk currently inhibiting industrial development of this valuable resource.

BIOFUELS

The conversion of municipal solids waste (MSW) and/or industrial wastes to gas produces a clean, useable form of energy, while simultaneously eliminating disposal problems and associated costs. Both biological and thermal conversion processes for waste gasification should be researched.

Biological Conversion:

IGT designed and is operating a biological conversion test facility which is located at Walt Disney World in Orlando, Florida. This facility currently converts a mixture of water hyacinths and sewage sludge to methane gas. This test facility should be used in a program to broaden the application of the process to a mixture composed of municipal and/or industrial wastes and sewage sludge with a low concentration of water hyacinths. The goal of the program will be to develop a process that disposes of municipal/industrial wastes and sewage sludge at a 20:1 ratio, the typical production ratio of most municipalities.

IGT recommends $1.35 million for the joint funding of an ongoing GRI research program at the Walt Disney World test facility to convert MSW, industrial wastes and sewage sludge to methane gas.

Thermal Conversion:

Technology for recovery of energy in the form of steam from burning of municipal solid waste (MSW) or refuse-derived fuel (RDF) is commercialized, but has limited application because the steam must be utilized on-site. The thermal conversion of RDF or MSW to a fuel gas is an attractive alternative.

Pressurized fluidized-bed gasification of RDF or MSW would provide high throughput, high conversion of organic carbon, and a fuel gas which can be used directly for combined cycle power generation or sold for off-site use. IGT recommends a research program to investigate pressurized, fludized-bed gasification of RDF and MSW utilizing an existing process research unit (PRU).

Because RDF is more highly processed than MSW, the program should begin by conducting parametric gasification tests with RDF to determine the effects of temperature and pressure on product gas quality, as well as an analysis of all process streams for potential pollutants. The data obtained for RDF will be helpful in directing the research for MSW, which contains inorganic materials in addition to the components found in RDF.

Feeder designs for MSW should be evaluated and gasification tests in an existing sloping grid bottom for the separation of the inorganic solids present in MSW should be conducted in an existing gasifier. The effects of seasonal variations in the composition of MSW should also be researched.

IGT recommends $2.0 million for thermal conversion of MSW or RDF in the existing high pressure inert fluidized-bed PRU.

Thermal Energy Storage

There are numerous applications in which either the availability of high temperature thermal energy does not match the short term needs or in which the energy demand cannot be economically met by the short term supply. An efficient high-temperature direct-contact thermal energy storage and recovery system (TES) would satisfy these short term energy mismatches. Examples include:

(1) residential heating where energy stored at off-peak rates could be used for heating during peak periods, thus leveling utility loads, reducing energy costs, and minimizing the need for new power plants/distribution capacity.

(2) industrial periodic processes such as those in the brick, ceramic, glass and steel industry in which energy normally exhausted up the stack during parts of the cycle can be recovered and stored for use to meet later process requirements, thereby replacing primary fuels.

(3) solar electric power generation, either terrestrial or for space applications such as the space station and the Strategic Defense Initiative in which energy can be stored when available for use when it is dark.

(4) thermal management systems will be used as part of any SDI space-based weapons system to control the temperatures of equipment such as refrigerators, compressors and energy weapons. High temperature TES could be used in such a thermal management system to absorb the waste heat created by such devices thus keeping them ready for reuse without fear of overheating. The energy stored in the TES would then be disposed of over a relatively long period of time without the need for excessively large radiators.

Currently high temperature industrial TES is accomplished by heating a ceramic brick during "charging" and cooling the brick to recover the heat during "discharging". The low energy storage capacity of the brick results in large, heavy, heat storage systems. Increased energy storage capacity can be achieved using phase change materials (PCM) which would be alternately melted and solidified, thus storing and releasing the energy at the desired temperature. Previous atempts at using PCM's have proven impractical because of the change in volume upon melting and solidifying, and the great resistance to heat flow through the solid material.

IGT has developed a composite TES media in which a PCM of the desired melting temperature is contained within a porous ceramic. The composite retains the PCM both in the solid and liquid phases, thus storing large amounts of heat while avoiding the problems of external volume change and poor heat transfer. When compared to ceramic bricks, the composite TES system results in 45% less weight and 35% less volume at an increase of more than 25% in efficiency. This composite TES technology can be tailored to any of the specific applications mentioned earlier. Information obtained on one application may benefit other applications.

This technology is the subject of an International Energy Agency (IEA) annex in which the U.S. government has responsibility for the development of a composite latent heat TES media and subsequent design, installation, instrumentation and operation of a full scale demonstration in the brick/ceramic industry.

IGT recommends $2.0 million to continue research on applying the composite phase change TES technology to industrial applications, specifically by increasing the heat storage capacity of the composite, constructing a PDU, conducting tests of the composite media, and using the PDU test data to initiate design of a cost-shared, proof-of-concept facility to be located at an industrial site.

STATEMENT OF

LEROY MICHAEL, JR.

President of the
Colorado River Energy Distributors Association

On

President's FY 1987 Budget Requests For

Bureau of Reclamation

and

Western Area Power Administration

Before the

House Appropriations Committee
Subcommittee on Energy and Water Development

April, 1986

STATEMENT OF

LEROY MICHAEL, JR.

Before the

House Appropriations Committee
Subcommittee on Energy and Water Development

I am Leroy Michael, Jr., President of the Colorado River Energy Distributors Association ("CREDA"). I am also Associate General Manager, Planning and Resources of Salt River Project. My business address is P.O. Box 52025, 1521 Tempe Drive, Phoenix, Arizona 85281 (Telephone: 602/236-5409).

On behalf of CREDA, I wish to thank the Chairman and members of this Subcommittee for the opportunity to appear before you in support of certain aspects of the Administration's FY 1987 Budget. Specifically, my testimony will be directed at requests for appropriations for the Bureau of Reclamation and the Western Area Power Administration.

CREDA is a non-profit Colorado membership corporation comprised of 18 publicly-owned electric utility systems, organizations of publicly-owned electric utility systems and state agencies located in the Colorado River Basin states of Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming. A complete list of CREDA's members is attached for your reference.

CREDA represents statutory preference customers which purchase nearly all of the electric power and energy produced by the Colorado River

Storage Project plus significant portions of the Boulder Canyon and Parker-Davis Projects and 100 percent of the Rio Grande Project. These purchases are all from the Western Area Power Administration. CREDA's members render electric service to hundreds of thousands of rural, residential, commercial and industrial customers.

A. Department of the Interior, Bureau of Reclamation

CREDA supports the Bureau of Reclamation's overall request for FY 1987 New Budget Authority of $835,120,000. Although the FY 1987 request appears to be adequate to carry out the Bureau's current program, CREDA is troubled by what appears to be a continuation of the President's no "new starts" policy as far as major federally-funded water and power projects are concerned. This policy represents a continued restriction on the development of the Nation's water and power resources.

CREDA acknowledges that the Nation faces an extreme budget crisis; however, CREDA must urge this Subcommittee not to lose sight of the fact that the Nation also faces a crisis of another nature. Every year needed water projects are deferred means another year of lost water development benefits. Rather than being stored and applied to the land, water is allowed to run to the sea. Farms are not irrigated, crops are not developed and, ultimately, the Nation's gross national product does not keep pace with the needs of the Nation's citizens.

CREDA urges this Subcommittee to carefully weigh the Nation's fiscal and water development and insure that at least the amounts requested in the President's Budget for the Bureau of Reclamation are approved. The Subcommittee should also consider augmenting the President's request where appropriate. Continuation of what is essentially a no "new starts" policy for federally-funded water projects is essentially continuation of a no growth policy for rural America -- a policy which this country cannot afford to perpetuate much longer.

B. Department of Energy, Western Area Power Administration

The Western Area Power Administration plays an important role in the delivery of electric power from federal water projects. Western is a vital link in making power resources available to the Nation, as well as helping generate the revenues required to pay back the cost of federal power and irrigation projects. Western's Colorado River Storage Power System and Parker-Davis System are particularly important to CREDA members. CREDA supports the full President's FY 1987 New Budget Authority Budget Request for Western of $240,309,000 and obligational authority of $82,000,000 for the Colorado River Basin's Power Marketing Fund.

C. Sale of PMA's

I would like to close my remarks today by addressing a very troublesome proposal which has recently been advanced by the Administration to "de-federalize" the Department of Energy's Power Marketing Administrations.

Members of this Subcommittee have expressed their opposition to the Administration's proposal in strong and clear terms. CREDA joins this Subcommittee in opposing the sale of these valuable assets of the Nation's taxpayers. A resolution adopted by the CREDA Board of Directors on March 27, 1986 is attached to this Statement.

CREDA notes that as of September 30, 1985, Western has repaid some $1.8 billion to the Treasury for outlays in prior years in constructing water and power projects. Western is "on time" in retiring its remaining $2.3 billion in unpaid investment. Therefore, CREDA finds it strangely anomalous in this day of unusually restricted budgets for anyone to propose the sale of federal assets which return to the government two to three times more in revenues than they require in appropriations. While the Administration has promised to seek legislation to implement any plan it ultimately adopts for the sale of the power marketing administrations, it is wasteful to even study de-federalization, as members of the Subcommittee have aptly pointed out.

CREDA is also concerned that the Administration appears to be anxious to modify current PMA repayment practices. Again, CREDA is pleased that again the Administration appears to be willing to obtain legislation before it proceeds with any such changes. Without knowing the specific nature of the changes to be proposed, CREDA can only note that as far as Western is concerned, current repayment practices have served the federal government well. Under the law, rates are to be set as low as possible, consistent with sound business practices. Western's rates generally conform to this principle and, since they have resulted in Western being "on time" in retiring unpaid federal investments in water and power projects, should not be altered.

In closing, may I say on behalf of CREDA that it is a pleasure to appear before you today. CREDA supports this Subcommittee's efforts to continue the development of the Nation's water and power resources and urges that it take steps to insure that the Administration shares that commitment and continues a program of healthy resource development in the West.

4/15/86

COLORADO RIVER ENERGY DISTRIBUTORS ASSOCIATION

Following is a detailed listing of the Colorado River Energy Distributors Association ("CREDA") and systems which are associated with or comprise such Member for purposes of participation in CREDA.

CREDA Member	Associated Systems
Arizona Municipal Power Users Association	Cities of Saford and Towns of Thatcher and Wickensburg, Arizona; San Carlos Irrigation Project; San Carlos Irrigation District; Cortaro Marana Irrigation District; and Hohokam Irrigation and Drainage District.
Arizona Power Authority	Chandler Heights Citrus Irrigation District; Queen Creek Irrigation District; and San Tan Irrigation District.
Arizona Power Pooling Association	Mesa City; Electric District No. 2,; Arizona Electric Power Corporation (including Anza Electric Coop; Duncan Valley Electric Coop.; Graham Co. Electric Coop; Mohave Electric Coop.; Sulphur Springs Valley Electric Coop.; and Trico Electric Coop.).
Colorado River Commission of Nevada	Boulder City; Overton Power District No. 5; Lincoln City Power District No. 1; and Valley Electric Association.
City of Colorado Springs, Colorado	(Not applicable)
City of Farmington, Utah	(Not applicable)

CREDA Member	Associated Systems
Intermountain Consumer Power Association	Cities of Beaver, Bountiful, Enterprise, Ephraim, Fairview, Fillmore, Heber Light & Power, Holden, Hurricane, Hyrum, Kanosh, Kaysville, Lehi, Logan, Meadow, Monroe, Morgan, Mt. Pleasant, Murry, Oak City, Parowan, Spring City; Bridger Valley Electric Assn.; Dixie-Escalante Rural Electric Assn.; Flowell Electric Assn.; Garkane Power Assn.; Moon Lake Electric Assn.; and Mt. Wheeler Power, Inc.
Irrigation and Electrical District Association of Arizona	Ak-Chin Indian Community; Electrical Districts 3, 4, 5 and 6 - Pinal Co.; Electrical District No. 7 - Maricopa Co.; Maricopa County Municipal Water Conservation District No. 1; Ocotillo Water Conservation District; Roosevelt Irrigation District; Roosevelt Water Conservation District; and Welton-Mohawk Irrigation & Drainage District.
Navajo Tribal Utility Authority, New Mexico	(Not applicable)
Plains Electric Generation and Transmission Cooperative, Inc.	Kit Carson Electric Coop.; Otero County Electric Coop.; Mora-San Miguel Electric Coop.; Northern Rio Arriba Electric Coop.; Sierra Electric Coop.; Springer Electric Coop.; Socorro Electric Coop.; Central New Mexico Electric Coop.; Continental Divide Electric Coop.; Columbus Electric Coop.; Southwestern Electric Coop.; Jemez Mountains Electric Coop.; Navopache Electric Coop.
Platte River Power Authority	Cities of Estes Park, Ft. Collins, Longmont, and Loveland.
Provo City, Utah	(Not applicable)
Salt River Project Agriculture Improvement and Power District, Arizona	(Not applicable)

CREDA Member	Associated Systems
Southern Utah Valley Power Project	Strawberry Water Users Association and Cities of Payson, Salem, Spanish Fork and Springville, Utah.
Tri-State Generation and Transmission Association	Big Horn Rural Electric Co., Carbon Power & Light, Inc., Chimney Rock Public Power Dist., Garland Light & Power Co., Highline Electric Assn., Hot Springs County Rural Electric Assn., Inc. K.C. Electric Assn., Inc., The Midwest Electric Membership Corp., Morgan County Rural Electric Assn., Mountain Parks Electric, Inc., Mountain View Electric Assn., Inc., Niobrara Electric Assn., Inc., Northwest Rural Public Power Dist., Panhandle Rural Electric Membership Assn., Poudre Valley Rural Electric Assn., Inc., Riverton Valley Electric Assn., Inc., Roosevelt Public Power Dist., Rural Electric Co., Inc., Sheridan-Johnson Rural Electrification Assn., Shoshone River Power, Inc., Union Rural Electric Assn., Inc., Wheat Belt Public Power Dist., Wheatland Rural Electric Assn., Inc., Wyrulec Company, Y-W Electric Assn., Inc.
City of Truth or Consequences, New Mexico	(Not applicable)
Utah Municipal Power Agency	Cities of Manti and Nephi and Town of Levan, Utah.
Wyoming Municipal Power Agency	Cities of Cody and Powell and Towns of Fort Laramie, Guernsey, Lingle, Lusk, Pines Bluffs, and Wheatland.

PASSED: 3/27/86

A RESOLUTION OF CREDA OPPOSING SALE OF THE POWER MARKETING ADMINISTRATIONS

WHEREAS, CREDA is a non-profit Colorado membership corporation comprised of 15 publicly-owned electric utility systems, organizations of publicly-owned electric utility systems and state agencies located in Colorado River Basin states of Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming whose members purchase nearly all of the electric power and energy produced by the Colorado River Storage Project, and

WHEREAS, energy generated at federal hydroelectric facilities is purchased by more than 1,000 consumer-owned utility systems that serve homes, farms, businesses and industry in 34 states, and

WHEREAS, the federal investment in hydropower is being systematically repaid to the U.S. Treasury, with interest, by federal power customers and power revenues also contribute a significant amount of revenue to assist the repayment of irrigation costs, salinity control and certain fish and wildlife mitigation programs, and

WHEREAS, some 275,000 manufacturing, wholesale, retail and service companies nationwide, which employ more than 3,000,000 people and contribute nearly $240 billion to the national economy, are served by consumer-owned utilities that rely on federal power purchases for all or part of their bulk power supply, and

WHEREAS, the sale, transfer or other disposal of the power marketing administrations or the federal powerplants and related facilities could:

- threaten consumer-owned utilities and their customers with uncertainty of supply and significantly higher power rates,
- undermine the ability of consumer-owned utilities to provide reliable electric service at competitive rates and thereby increase monopoly in the electric utility industry,
- renege on existing repayment agreements between the United States and federal power users, and
- eliminate a reliable, long term source of revenues for the U.S. Treasury;

NOW, THEREFORE, BE IT RESOLVED, that CREDA opposes the sale, transfer, exchange, lease or other disposition of the federal power marketing administrations and powerplants and related facilities for the production and transmission of electricity.

DR. PAUL G. ABRAMS

NEORX CORPORATION

APPROPRIATIONS SUBCOMMITTEE
ON ENERGY AND WATER DEVELOPMENT

US HOUSE OF REPRESENTATIVES

APRIL 16,1986

TESTIMONY FOR THE RECORD

Mr. Chairman and Members of the Subcommittee, my name is Paul G. Abrams and I am Vice President and Medical Director of NeoRx Corporation, located in Seattle, Washington.

NeoRx, formed in late 1984, is a small biotechnology research and development company established to facilitate the rapid application of two essential and complementary technologies for the diagnosis and treatment of cancer. Our main area of research has been in immunoconjugation and related technology, focusing on both imaging and therapy. We recently filed patents on several of our conjugation methods and have begun clinical trials with patients at the University of Washington.

In 1973, the Congress announced its intention to "Wage a War on Cancer." Thirteen years later, cancer continues to be the second leading cause of death. During the last ten years of cancer-related research there has developed many new technologies that can assist physicians with safer and far superior methods of diagnosing and treating cancer. These include cell biology, immunology, protein chemistry, recombinant DNA and, most recently, monoclonal antibodies. Technologies to link appropriate agents to antibodies have lagged behind antibody development, frustrating hopes for immediate application of these improved products. The creation of suitable linking systems that meet applicable regulatory requirements of safety and efficacy will result in greatly improved products for the diagnosis and treatment of cancer for our citizens and those of other countries.

The need to take immediate combative steps to erradicate cancer prompted the Congress in 1985, as a part of the Public Health Service Act, authorized the establishment of new centers for basic and clinical research into, training in, and demonstration of, advanced diagnostic, prevention and treatment methods for cancer. To this end the federal government was authorized to enter into cooperative agreements with public or private agencies or institutions. So important is the need to find a cure for cancer, that the Congress has urged contractual arrangements with private entities, even on a sole-source basis, if doing so will bring about a more immediate victory in our fight against cancer.

NeoRx, as a small business entity, has dedicated itself to remaining on the cutting-edge of clinical technology in this critical area of cancer research. Its development of monoclonal antibodies to deliver potent treatments to cancer cells without harming normal cells and causing the typical side-effects seen with conventional drug treatments represents a promising new weapon in our war against cancer. Monoclonal antibodies have the ability to attach specifically to tumor cells through special binding sites without attaching to normal tissues. As a result, their role becomes one of directing therapy (radiation, drugs, or new classes of plant toxins) to tumor cells while sparing normal organs. A potential impediment to the rapid development of these promising agents is that they can also, to a small degree, kill normal cells. Although these antibody agents can bind specifically to tumor cells, they must travel through the bloodstream and through normal tissues before arriving at the final site. Along the way, they may give off radiation to normal tissues or non-specifically attach to normal organs because they are "sticky", thereby causing some damage. This issue, the amount of the antibody that binds to the tumor compared to the amount that binds to normal organs, is generally referred to as dosimetry. Recent advances in three-dimensional imaging technology, namely a form of technetium tomography (SPECT) and positron emission tomography (PET), now provide the opportunity for determining dosimetry quantitatively. Many problems need to be solved, however, before immunoconjugates can find their place in the diagnosis or treatment of cancer.

Cancer is an national and international problem. Monoclonal antibody (Mabs) based therapy of cancer represents an emerging form of treatment. Its importance lies in the fact that many malignancies, including very small ones, can be imaged in vivo with Mabs grown against a specific type of cancer cell. This technique can spot tumors that are missed with a CT scan. Mabs will not displace conventional cancer treatments, but they have become the best, if not only, hope for many forms of cancer. A Federal partnership with companies such as NeoRx is necessary to insure that this hope does not become lost due to a lack of financial resources necessary for final development, regulatory approval, and mass production.

Mr. Chairman, we understand that the Department of Energy is currently conducting research and development activities in the area of nuclear medicine. The technologies involved in this research compliment and enhance those involved in monoclonal antibody research and development. We believe that a collaboration between the Department of Energy and NeoRx can more immediately solve the technical problems that are preventing the use of immunoconjugates in cancer diagnosis and treatment today. The final result will be a victory in the war on cancer.

UR
LLE

University of Rochester
College of Engineering and Applied Science

Robert L. McCrory
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3 April 1986

The Honorable Tom Bevill
Chairman, Subcommittee on Energy
and Water Development
2302 Rayburn House Office Bldg.
Washington, D.C. 20515

Dear Representative Bevill:

As you may know, the Department of Energy's Inertial Confinement Fusion Program has recently been reviewed by the National Academy of Sciences. At the University of Rochester, we are in agreement with the findings of the Report which, in general, are supportive of the technical effort and progress in Inertial Confinement Fusion, which has served the Nation's advanced weapons research well over the years.

It is important to note that the Committee suggests continued separate line item funding for the Inertial Confinement Fusion Program. The University of Rochester is not in agreement with Assistant Secretary Foley's suggestion that the line item status of ICF be abolished and absorbed within the general RD & T budget. While it is true that this manner of funding might maximize the flexibility of the weapons laboratory directors to meet their weapons related commitments, there is a real danger that the short term weapons commitments could jeopardize the considerable investment this Nation has made in Inertial Confinement Fusion over the years. We believe with the NAS Committee finding, that line item status gives greater liklihood of achieving the identified goals within the next five years.

Although we realize that DOE proposes to continue as a line item the ICF Research at the support laboratories, we see this as a fatal trap, for there is no reason to have support efforts, if there is no specifically identified major effort. As a result, the total ICF Program would be put in jeopardy by Assistant Secretary Foley's strategy. The strength of the Inertial Confinement Fusion Program has come from its identity represented by the six major participating laboratories for a number of years. I view with alarm and dismay the potential of destroying the delicate balance, the sense of achievement, and the impact an integrated program, as a separate line item will have in the next critical five year period.

I respectfully request that you permit inclusion of the statement for the record I have prepared for your subcommittee hearings on the Inertial Confinement Fusion appropriations. We at the University of Rochester are quite proud of our contributions to the National Defense Inertial Confinement Fusion Program, and are greatly indebted to you for your support over the years.

Sincerely,

Robert L McCrory

R.L. McCrory

RLM/lcf
cc: M. Marvin

United States House of Representatives

Ninety-Ninth Congress

Second Session

HOUSE COMMITTEE ON APPROPRIATIONS

Subcommittee on Energy and Water Development

Statement for the Record

Robert L. McCrory
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Laboratory for Laser Energetics
UNIVERSITY OF ROCHESTER
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April, 1986

SUMMARY

The University of Rochester's Laboratory for Laser Energetics (LLE) mission is to demonstrate the feasibility of laser fusion in support of the Defense Inertial Confinement Fusion Program. In FY 1987, LLE will begin its third year of a three year Cooperative Agreement with the U.S. Department of Energy to use the frequency converted twenty four beam OMEGA to address critical weapons physics issues in support of the national short wavelength program, continue operation of the National Laser Users Facility (NLUF), and continue to educate students and faculty in fusion, engineering, optics, and physics vital to defense problems. For a level-of-effort program (consistent with FY 1986 and the Cooperative Agreement), a total appropriation of $8,348,000 is required for FY 1987. Continued operation of the NLUF requires an additional appropriation of $700,000 for outside users of the NLUF.

PROGRAM STRATEGY

The basic concept of inertial fusion is that of implosion, driven by ablation, of a capsule containing thermonuclear fuel. There are two principal approaches to ICF: direct and indirect drive. In the indirect-drive approach, the laser beam energy is absorbed by a radiation case that converts the beam energy into x rays which then implode the target. In the direct-drive approach, a short-wavelength, high-intensity laser pulse is focused directly onto the thermonuclear capsule, ablating the outer layers which causes the target to implode.

The near term objective of the U.S. inertial fusion program is to demonstrate the feasibility of burning small masses of thermonuclear fuel using lasers or particle beams. An understanding of the physics of marginal fuel thermonuclear burn is essential to nuclear weapons research, development and testing programs. In the long-term, inertial fusion also has the potential of being a source of cost effective commercial power, if sufficiently efficient drivers (lasers or particle beams) can be developed. Also, in the long term, the potential for cost reductions in the weapons inventory due to ICF research can more than justify the resources this nation is presently spending on this program.

The National Academy of Sciences (NAS) review of the ICF Program has identified a number of issues for ICF. Of the twelve key issues cited in the NAS final report, LLE is addressing ten of them: Minimum drive energy required for ignition and high-gain; understanding plasma instabilities in laser-matter interactions at short wavelengths; investigating the efficiency of x ray generation; hydrodynamic stability of laser driven implosions; target fabrication requirements for laser fusion targets; demonstrating symmetry of drive required for high compression; understanding the physics issues for central ignition; exploring the capabilities of direct drive for laser fusion feasibility; developing target diagnostic instrumentation; and contributing to the development of advanced optical materials for driver technology.

In 1985, the NOVA laser was completed at the Lawrence Livermore National Laboratory (LLNL). The NOVA laser is operational and presently delivering 50 to 70 kJ of energy in the infrared and approximately half of this energy in the ultraviolet. The OMEGA glass laser system at the University of Rochester was fully converted to ultraviolet wavelength operation in February, 1985. OMEGA is currently capable of 2.4 kJ operation. Because the energy requirements for direct drive experiments is substantially less than that required for indirect drive, OMEGA experiments can investigate the capsule physics implosion issues which are central to the national program effort to demonstrate that the conditions required to drive a high gain capsule can be generated in the laboratory.

In the near term, experiments at LLNL and the support laboratories, of which Rochester is one, will be conducted to demonstrate that the required x-ray temporal pulse shape and drive uniformity, scaling of transport and plasma instabilities at high-gain-target scale lengths, the required stability of the imploding shell, the implosion velocities necessary for ignition, and final compressed thermonuclear fuel densities required for high gain can be obtained.

The conversion of OMEGA to the ultraviolet has resulted in a unique experimental facility for the investigation of spherically symmetric implosion experiments. The short term objective of the LLE program is to demonstrate drive uniformity with the OMEGA system sufficient to compress targets to densities in the range of several hundred times solid density. Densities up to one hundred times solid should be achieved on OMEGA using gas filled targets this year. Starting in late 1986, after improvements in illumination uniformity and the installation of a cryogenic capability presently under development at KMS Fusion, Inc., experiments should yield compressed fuel densities in excess of three hundred times solid by 1988.

The NAS final report notes (page 27): "The implosion of capsules with direct laser drive may be more efficient than indirect drive but it places greater demands on the symmetry of the driving lasers and on the control of hydrodynamic instabilities. The group at UR is now working on improving the drive symmetry of the 24-beam OMEGA laser sufficiently to allow compression of a cryogenic direct-drive target to 100-200 times liquid density. If this high-compression ratio can be accomplished with the small OMEGA laser, it would be necessary to take the potential of direct drive very seriously, and to consider a 30 kJ upgrade of OMEGA."

TECHNICAL ISSUES AND PROGRAM ACCOMPLISHMENTS AT LLE

The NAS final report on ICF states (page 73): "The University of Rochester (UR) is the only major unclassified ICF facility in the United States and is thus able to serve as a window to the greater scientific community, as a unique training ground for students and researchers, and as the focus of a user facility for applications ranging from x-ray microscopy and basic plasma physics to x-ray laser research." The report additionally cites the LLE for a number of accomplishments (page 73), including "Investigation and demonstration of high-efficiency frequency multiplication which now forms the basis for all the world's glass ICF laser programs, and is certainly a major cause of the present upswing in ICF technical results and prospects."

Experiments at LLE and elsewhere have revealed the following features: an absence of hot electrons generated by plasma processes which plagued progress in the early years of the laser fusion program; the first direct evidence that the Raman instability (another potential source of hot electrons) is stabilized; and high efficiency for the absorption of the laser light by the target. Collaborative experiments between LLE and the Los Alamos National Laboratory (LANL) have confirmed the high efficiency for the conversion of absorbed laser light to x rays (greater than 50%) on heavy element targets. In experiments conducted to establish induced spatial incoherence as an alternative approach to achieving high uniformity of irradiation in direct-drive geometries, NRL investigators have obtained favorable results. These results may accelerate progress in achieving the high densities required for program success.

Direct-drive ablation implosion experiments conducted at Rochester have demonstrated record thermonuclear neutron yields (April, 1985) which have been recently surpassed at LLNL (1986) which will be useful in the development of various high density diagnostic techniques for future experiments. Collaborative experiments between LLE and LLNL are presently in progress to exploit this technical opportunity.

The ICF program made possible the observation of amplified spontaneous emission of soft x-ray wavelengths. This important scientific achievement is of great interest in the U.S. Strategic Defense Initiative. OMEGA has been used to implode cylindrical plasmas. These experiments show considerable promise to provide a uniform, linear medium suitable for x-ray laser gain conditions. Future studies are expected to optimize the production of linear plasma for a variety of high brightness x-ray laser applications.

The major driver facilities, plasma diagnostics, target design capabilities, and target fabrication resources required to demonstrate the scientific feasibility of inertial fusion are now nearly in place. Experimental data on scale models of high gain targets which will be conducted in the near future should give increased confidence that high gain performance can be achieved. On the basis of experiments to be performed in the next few years, together with the development of high efficiency drivers, the optimal path to success should be apparent. As noted in the NAS report (Page 73) "The future program proposed by UR is to try to perfect the implosion symmetry to the point where 100-200 times liquid density can be achieved with the present 2.5 kJ OMEGA laser. This is a very challenging goal and should it be attained in 1988, they are proposing a 30 kJ upgrade of OMEGA with the prospect of demonstrating significant burn via direct drive. We believe that if they meet their milestone this is a reasonable and exciting prospect which we support, although no decision is required at the present time."

TRAINING AND MANPOWER

A number of graduate students concluded research for their degrees at LLE this past year. LLE continues to take great pride in its role of educating students and faculty. Government sponsored research helps the University to attract and retain faculty of the highest quality to educate students and conduct research in a variety of areas of vital interest to the country's defense programs. In research conducted by students and faculty at LLE, the Science Watch section of the New York Times (January 14, 1986) reported that "Researchers at the University of Rochester have reported measuring the world's fastest transistor using a special optical technique that tests electronic responses . . . " The electro-optic sampling technique was developed as part of the inertial fusion research program, and has now found an important role in helping maintain technological leadership of the United States in ultrafast electronics, which is vital to the national defense (e.g. SDI, battlefield management, communications command and control, intelligence gathering, etc). LLE's work in attracting new students for graduate and postgraduate study and research in areas of interest to the national inertial confinement fusion program and to advanced technology development has resulted in a large number of applications from prospective quality, highly-motivated students.

From its beginning in 1970, LLE has made the education of students one of its most important missions. This LLE mission is unique among the Inertial Fusion Program participants, and is vital to develop the needed special technical skills required by Defense Programs. We believe that the Laboratory will continue to fulfill its role to train the nation's scientific leaders for both the inertial fusion program and other advanced technology programs.

OPERATION AND MANAGEMENT OF THE NATIONAL LASER USERS FACILITY (NLUF)

Operation of the NLUF, a unique role of the University of Rochester in the national inertial fusion program, has resulted in a number of successes by users of the facility in FY 1985. A user experiment by faculty and students of the University of California (Berkeley) has provided a powerful new diagnostic for fusion plasmas, the streak photographic elliptic analyzer x-ray spectrograph.

Experiments conducted by the University of Texas to study nuclear fluorescence excited by x rays from a laser produced plasma have resulted in great interest in the possibility of the development of a gamma ray laser. The Innovative Science and Technology Office of the Strategic Defense Initiative Organization has shown considerable interest in the concepts investigated by the University of Texas and Rochester. The Institute for Defense Analysis Memorandum (Report M-122, November, 1985) notes that "Gamma-ray lasers, or grasers which would provide intense, controllable and directable coherent sources of such radiation -- in which phase as well as intensity have significance -- would have a revolutionary impact on most fields where both gamma-rays and x-rays are used already . . . With the advent of the challenging goals of the Strategic Defense Initiative, the gamma-ray laser became a key innovative concept worthy of careful and open consideration . . . An intense effort should be made in nuclear data base development and search for isotope candidates . . . gamma-ray laser development effort, at least for the present, should remain unclassified. This is important to the free exchange of ideas and the need for the participation of the university community which otherwise would be excluded."

Over 176 experimental shots were devoted to user experiments at LLE in FY 1985. Users came from the University of Florida, the University of Texas (Dallas), the University of California (Berkeley), the University of Maryland, the Los Alamos National Laboratory, the University of California at Davis, and the University of California in Los Angeles. The success of the OMEGA facility to serve a wide range of users in defense oriented research certainly supports the need to continue the program for users.

PROGRAM FUNDING AND MANAGEMENT

In October, 1984 the Department of Energy executed a three-year Cooperative Agreement with the University of Rochester. The agreement funds the LLE at a planned $23,468,000 for the three years not including funds which are provided directly to the NLUF users.

The negotiated Agreement which established Rochester's program as a level-of-effort program in these times of austere federal budgets, funds 63.6 man-years per year. Since 1971, the LLE has combined state, federal, and industry funds to support the research effort and continues to do so. Approximately $127,000,000 have been invested in the program, of which only 57% has come from the Department of Energy Defense Programs. Of all the inertial fusion program participants, Rochester has the largest continuing non-federal program helping to match the federal support.

In discussing management issues of the ICF Program, the NAS final report notes (page 33) "...the universities and NRL constitute a very important component, providing not only innovative ideas and major technical advances, but also training of personnel and a source of knowledgeable advice and criticism of the larger programs. Among the universities there is a major research effort in inertial confinement fusion at the University of Rochester, with smaller but prominent research activities at Cornell University, the University of California at Davis, the University of California at Los Angeles, the University of Maryland, and the University of Wisconsin. Even in stringent budget circumstances the Committee wishes to emphasize the importance of maintaining the vigorous research and intellectual base at the universities and NRL. Indeed, given the present marginal level of support for the smaller programs, and their unusually high impact and productivity, an effort should be made to selectively strengthen the most meritorious activities."

It is important to note the majority of the NAS Committee (page 37 NAS final report) "... held that ICF research should remain a separate line item, at least for the next five years, as the best way to achieve the major goals of the program in that time." The NAS report (page 36) states "If the program were not a separate line item managed by DOE Headquarters, the smaller programs might not be funded in any effective way."

In order to sustain a level-of-effort program to continue operation of the recently frequency-converted OMEGA system, manage the NLUF, and continue to train and educate students and faculty, LLE requires an appropriation of $8,348,000 (consistent with the Cooperative Agreement and program planning figures submitted to the Nevada Operations Office of DOE). These monies do not include funds for outside users of the NLUF. Approximately $700,000 needs to be appropriated in order to continue the NLUF program.

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WITNESSES

	Page
Abernathy, W.A	1391
Abeyta, P.T	321
Abraham, W.P	1073, 1144, 1228
Abrams, Dr. P.G	1733
Adams, Houston	314
Akaka, Hon. D.K	845
Albert, M.L	1549
Alexander, Hon. Bill	575
Alford, G.F., Jr	35
Allen, Dan	1250, 1357
Anderson, Hon. G.M	1023
Anderson, Jay	1073, 1137
Anthony, Hon. Beryl, Jr	296, 510, 513
Anton, Gerald	821
Archer, O.M	24
Arthur, Dwight	742
Austin, Ben	1073, 1170
Babbitt, Bruce	619, 640
Badham, Hon. R.E	1019
Bagley, L.M	1073, 1219, 1304, 1403
Bailey, C.D	656
Baker, C.A	742, 752
Bangerter, N.H	944
Banks, W.A	83
Banton, J.W	167
Barber, G.L	1156
Barcello, R.F	619, 632
Barchie, N.J., Jr	28, 176
Barfoot, J.W	42
Barsch, Ray	1073, 1093
Barton, A.R	161
Bauer, M.G	731
Bax, Virginia	1462
Beach, Robert	1073, 1153
Beilenson, Hon. A.C	1042
Benham, Elizabeth	357
Benham, R.M	357
Berg, Harold	1250
Berkley, R.L	366
Bernardi, Dave	1250, 1382
Biggs, O.L	38
Bird, Peggy	665
Bishop, Ron	1489, 1595

Page
Blackburn, Frank 569
Blake, T.L 60
Blanchard, James 1695
Bland, Calvin 1622
Blecha, Jim 1250, 1371
Bockmon, Cindy 565
Bohen, F.M 1639
Bohn, William 1550
Bollinger, Harvey 417
Bolls, Newman 474, 487
Bonner, A.B 1073, 1162
Bourbeau, Ron 417
Box, Edward, Sr 742
Boxer, Hon. Barbara 1034
Boyle, Michael 1539
Brennan, Doris 742, 762
Bridges, Gary 1552
Briley, Leonard 417, 452
Brown, Ann 742, 760
Brown, Hank 1508, 1519
Brown, Hon. G.E., Jr 1057
Browning, Buddy 85
Bryant, Charles 1073, 1112
Bueche, C.J 494
Burch, L.C 742
Burke, R.A., Jr 65, 179
Burts, Ezunial 1405
Butchert, J.R 1245
Caccese, Lewis 384
Callahan, Hon. Sonny 1, 99, 107, 188
Carr, William 174
Carter, J.R 503
Catino, M.A 1073, 1148
Celeste, R.F 1695
Chabert, M.J 494
Chapman, W.C 417, 510, 533
Christensen, N.L 1028
Clemens, Col. R.O., Jr 1, 64
Cobey, Hon. Bill 203
Coble, Hon. Howard 203
Coelho, Hon. Tony 1063
Coffey, Richard 385
Cologne, G.B 1073
Contaoi, Fred 1073
Contra Costa County 1373
Conway, G.A 1567
Creswell, R.M 34
Crunkilton, A.L 563
Curry, D.G 1564
Dannemeyer, Hon. W.E 1037
Darden, Hon. George (Buddy) 79
Daschle, Hon. T.A 1416
Datwyler, Christian 1073, 1103
Daub, Hon. Hal 1533

	Page
Dauphinais, Richard	827
Dawson, R.K	749
DeNier, R.E	742
Deutsch, Alex	1410
DeVito, John	1073, 1189
Dickinson, Hon. Bill	1
Dicks, Hon. N.D	712
Dingler, Capt. C.R	1281
Dorgan, Hon. B.L	1664
Dornan, Hon. R.K	1047
Douglass, R.C., Jr	48
Dowdy, L.D	474, 484
Drummond, Jerome	147
Duggan, Don	510, 527
Dullam, T.F., Jr	1073, 1223
Dushinske, R.L	1616
Dwyer, J.D	713
Edelen, Hon. M.B	1569
Edison, D.P	711, 721
Edwards, Hon. Mickey	458
Elefson, D.O	357
Emerson, Hon. Bill	474
Erdreich, Hon. Ben	78, 109, 201
Esau, R.R	1073, 1119
Etheredge, Jamie	23
Faerber, K.R	246
Faker, Joe	711, 726
Farley, J.M	132
Fetcher, John	809
Fiedler, Hon. Bobbi	1059
Fletcher, Ray	1250, 1260
Flippo, Hon. R.G	80, 110, 289
Flynn, J.K	1073, 1106
Folmar, Emory	67
Forbis, John	203
Foster, J.O	292, 300, 310
Frenzen, Clarence	1612
Fricke, Milton	1533
Frye, Darrell	203
Gable, W.C	629
Gangwish, R.K	1495, 1585
Garvie, W.C	1387
Getches, D.H	1520
Giallanza, Sam	579
Gibbens, M.R	663
Gieringer, W.A	292, 305
Gilbert, J.B	1221
Gilmer, J.B	978
Goddard, Hon. Terry	619, 646
Goodson, Leroy	222
Gordon, Hon. Bart	1687
Gorman, Edward	1250
Grace, C.H	569
Graham, G.A	313

Page
Gray, Hon. W.H 1622
Green, Hon. Bill 818
Greene, Charles 221
Greer, J.P 742, 764
Griffin, W.J. "Buddy" 1, 85, 102
Guthans, R.A 169
Haar, H.R., Jr 579
Haines, John 384
Hamberger, E.R 239
Hammerschmidt, Hon. J.P 292
Hammock, R.L 1233
Hammon, Alfred 276
Hansen, F.E 362
Hansen, Hon. J.V 943, 951
Herbert, B.L 154
Harcourt, H.B 190
Hargens, R.G 1588
Harmon, Mike 566
Harrell, D.L., Jr 59, 173
Harris, R.G 569
Harrison, W.A 384
Harrison, W.H., III 156
Hart, J.C 357
Hastings, Manuel 742
Hayden, Channing 610
Hazama, Chuck 375
Heflin, Hon. Howell 96, 186
Hefner, E.M 1566
Heinz, C.B 41
Henderson, David 651
Henley, A.T 1073, 1115
Herrick, David 742
Hilbert, Robert 943, 958
Hirt, H.B., Jr 190
Hirte, E.K 701
Hitt, R.V 70
Hogoboom, Bart 368
Hoier, Mel 1533, 1543
Hood, Louis 827
Hope, R.M 54, 85, 134
Hornady, B.C 39
House, Ernest 742
Howard, Hon. J.J 1662
Huckaby, Hon. Jerry 510
Huerta, M.P 276
Hughan, Roberta 1073, 1134
Hughes, Hon. W.J 833
Hughey, P.F 1376
Hunter, Hon. Duncan 1053
Hussey, John 560
Hutchison, Ray 47
Ives, Capt. P.L., Jr 384
Ivey, N.S 139
Jennings, Bob 1250

Page
Jensen, M.S 1551
Jess, J.M 1505, 1562
Johnson, Hon. Tim 1570
Johnson, Randall 510, 552
Jones, Betty (Mrs. W.C.) 564
Jones, D.E 510, 557
Jones, W.B 1682
Jordan, J.T 63
Jud, S.A 701
Junkins, Bobby 1
Kaspar, J.F 711
Kelly, J.R 384
Kerrey, Bill 1503
Kerrey, Robert 1531, 1560, 1588
Kerst, George 1523
Kilday, D.E 1571
King, T.K 171
Kirk, J.J 276
Kirk, Ray 365
Klinger, W.H 329
Klingner, Michael 329
Knag, Jim 1556
Knoki, Rosemary 321
Knudsen, E.L 1553
Kogovsek, Hon. Ray 742
Kolbe, Hon. Jim 619, 624
Kouns, Sinclair 569
Kroeger, F.V 742, 792
Krygsman, Alexander 1250, 1354
Kurle, Morris 1416
Lagomarsino, Hon. R.J 981
Lamm, R.P 1695
Lange, H.G 1571
Langner, R.H 1250
Law, J.C 157
Lee, B.S 1714
Lee, Kai 812
Lee, Larry 190
Lee, R.E. "Swede" 562
LeFevre, K.C 276
Lehman, Hon. R.H 1011
Lenihan, J.J 1073
Leslie, H.A 43
Levine, Hon. Mel 988
Lewis, Hon. Jerry 1024
Lindsey, Richard 1
Linot, T.M 368
Locklear, Arlinda 827
Lodge, Sheila 1250, 1380
Lott, Hon. Trent 1676
Lowman, C.R 128
Lowrie, R.R 1385
Lucas, R.D 168

Page
Lungren, Hon. D.E. 1040
Lutz, F.R. 1073, 1175
Madgett, J.O. 357
Malmquist, Gaylke 1538
Manchester, William 742
Marioncelli, Ted 1250
Markarian, Jim 1073, 1213
Marks, Hon. Milton 1069
Mason, J.L. 24
Mathews, Doyle 656
Maulhardt, Lynn 1073
Maynes, F.E. 742, 755, 796
McCain, Hon. John 619, 627
McCandless, Hon. A.A. 985
McCarron, J.L., Jr 85
McCluney, J.A. 160
McConnell, D.C. 329
McCormack, Wallace 1073
McCrory, R.L. 1738
McDonald, J.W. 742, 785, 1521
McDonough, W.A. 1280
McGill, T.W. 731
McKean, George 1073, 1199
McKenzie, J.T. "Tom" 1
Meade, R.A. 62
Metropolitan Water District of Southern California 619, 636
Michael, Leroy, Jr 1723
Michell, Capt. Jacques 579, 617
Miley, G.H. 1708
Millan, E.J. 1290
Miller, Dale 222
Miller, Hon. George 1031
Mills, Stanley 1073
Milner, Ronald 1506, 1512
Mineta, Hon. N.Y. 1002
Mollohan, Hon. A.B. 338
Monson, Hon. D.S. 943
Mooney, B.H., Jr 81
Mooney, Burgett, III 82
Moore, Hon. W.H. 573
Moore, J.G. 1384
Morgan, S.L. 30, 102, 151
Morrison, Hon. Sid 656
Murphy, J.E. 742, 757
Murry, Tom 701
Nath, E.W. 368
Neely, R.C. 142
Nelson, Carl 1246
Neufeld, Bob 1416
Nichols, Hon. Bill 112
Nichols, O.S., Jr 102, 116
Nielson, Hon. H.C. 943, 954
Nordwall, A.R. 742
Nutting, S.T. 84

	Page
O'Halloran, J.T	1073
Oakar, Hon. M.R	1650
Oberstar, Hon. J.L	382
Occhiato, Michael	742, 801
Offringa, P.J	240, 344
Ogden, D.M., Jr	695
Olberding, Paul	656
Orr, J.D	222
Ortiz, Hon. S.P	223
Osborne, George	1073, 1141
Packard, Hon. Ron	1018
Palmer, R.B	239
Panetta, Hon. L.E	989
Papio Natural Resources District	1546
Parker, Tim, Jr	32, 163
Parson, E.B., Jr	152
Pashayan, Hon. Charles, Jr	1056
Patterson, Curtis	474, 494
Payne, Tom	417
Peabody, Vida	742
Penny, Hon. T.J	375
Pettegrew, R.L	385
Phillips, Reid	656
Pieper, W.J	329
Pierce, J.A	31
Pinnecoose, Guy, Jr	742
Plomarity, H.G	222, 235
Pohost, Dr. G.M	1603
Porter, J.T	742, 766
Powell, W.A., Jr	141
Powers, Dr. W.L	1525, 1577
Powers, Tom	1250
Prestridge, R.M	510, 569
Pretzer, Norman	619, 634
Price, C.G	61
Proctor, L.H	1, 14
Pyne, J.H	144
Rambeau, M.B	25, 85, 162
Rancho California Water District	1186
Ratcliffe, D.M	165
Raybuck, R.W	170
Reed, Ted	1397
Reishman, T.V	239
Reynolds, S.E	777, 968
Rhodes, Charles	369
Rhodes, Tom	203, 215
Richardson, Hon. Bill	1658
Rickert, M.J	1593
Riley, R.W	1695
Robinson, Marvin	384
Rodgers, Beverly	417
Roemer, Hon. Buddy	510, 517
Rosenzweig, R.M	1699
Rotundo, Louis	845, 931

	Page
Royuk, Wayne	1554
Rushton, W.M. "Bill"	21, 125, 190
Sanguinetti, P.A	46
Saunders, Ben	1511, 1518
Saunders, Frank	1250
Saxvik, R.W	812
Schafer, Richard	1073
Schellenger, Capt. S.M	384
Schlange, Andrew	1073, 1178
Schosberg, B.S	52
Selber, Aaron, Jr	569
Shaughnessy, C.P	1571
Shaughnessy, M.J	1612
Shea, P.J	821
Shelby, Hon. Richard	183
Shipps, T.H	742
Shore, Melvin	1400
Short, C.S	716
Shumway, Hon. N.D	996
Simmons, T.M	474
Simon, Bernie	1533
Sinner, G.A	1620
Smith, Hon. R.F	731
Smith, Hon. Virginia	1487
Smith, J.E	619, 630
Soike, H.R	711
Solinger, Peter	375
Sonderup, Lee	1612
Sottile, Dr. A.L	1669
Sparks, Capt. Jack	385
Starrh, F.L	1004
Stevens, Rich	656
Stokes, Hon. Louis	1650
Strang, Hon. M.L	742
Stroud, J.M	567
Stroud, John	510, 545
Stump, Hon. Bob	649
Suttle, J.H	1533
Swanson, Larry	1498
Takahashi, Patrick	845, 856
Tanner, Homer	510, 538
Taormina, A.J	1302
Taylor, J.C	1705
Taylor, J.L	1073
Taylor, Tom	742, 774
Ternyik, W.E	701
Terwillegar, Earl	656
Theis, A.R	494
Thomas, Hon. W.M	1003
Thompson, Doug	1591
Thompson, J.R	1691, 1695
Thompson, Twyla	1241
Thomson, C.L	292, 307
Tidmore, A.H	44

Page
Todd, L.A 1555
Torbert, L.M., Jr 26, 145
Tucker, Jimmy 40
Turner, J.S., Jr 569
Udall, Hon. M.K 619
Vanderloop, James, Sr 1612
Vanosdel, C.W 629
Ventura Port District 1393
Visclosky, Hon. P.J 1632
Volk, Art 1564
Waggonner, J.D., Jr 510
Waite, M.G 1
Wallace, Capt. James 384
Wallace, G.C 68, 122, 199
Warner, A.H., III 37
Webb, B.C 159
Weinard, B.A 181
Weir, R.S 463
Wentworth, Russell 656
Whatley, Kirb 701
Whitley, Hon. C.O 1678
Wicks, Douglas 24
Wilde, G.I 1073
Wilhoit, D.W 1073
Wilks, R.B 821
Williams, H.G 349
Williamson, D.E 1504, 1558
Williamson, D.L 1563
Williamson, Daryld 1460
Wogan, J.W 730
Wolf, M.J 701
Wonderling, Rob 384, 405
Woodbury, Bruce 1462
Wright, R.L 411
Yamagata, Ben 934
Yeargan, Mack 45
Zimmerman, G.R 778, 803